

1 **Section 5-700 Regulations for Optional Development Types**

2 **5-701 Transition (TR) Districts Lot Standards.**

3 (A) **Purpose.** The purpose of the Transition (TR) Districts Lot Standards is  
4 to:

- 5 (1) Provide for development in the Transition (TR) zoned areas of the  
6 County, in ways that encourage efficient development patterns, ~~and~~  
7 ~~protect primary conservation areas in ways that conform with~~  
8 ~~conservation design standards.~~
- 9 (2) Facilitate a transition in the scale of development from the  
10 suburban area to the rural area of the County.
- 11 (3) Facilitate the protection of the 300-foot buffer proposed along the  
12 Bull Run, ~~consistent with the standards and requirements of~~  
13 ~~RSCOD.~~
- 14 (4) Facilitate the protection of the 300-foot buffer along the Goose  
15 Creek and the Goose Creek Reservoir and the Beaverdam  
16 Reservoir, ~~consistent with the standards and requirements of~~  
17 ~~RSCOD.~~

18 (B) **Applicability.** The procedures and standards of this section shall apply to  
19 the subdivision of two or more lots on all lands located in the TR-10, TR-3  
20 (TR-3UBF, TR-3LBR, TR-3LF), TR-2, and TR-1 (TR-1UBF, TR-1LF)  
21 districts.

22 (C) **Standards.** The standards of this section shall apply to all development  
23 subject to the TR Districts Lot Standards.

24 (1) **Base Density.** The maximum gross density allowed in the TR  
25 districts under these standards is:

- 26 (a) TR-10 district: 1 dwelling unit per 10 acres.  
27 (b) TR-3 districts: 1 dwelling unit per 3 acres.  
28 (c) TR-2 district: 1 dwelling unit per 20,000 sq. ft.  
29 (d) TR-1 districts: 1 dwelling unit per 40,000 sq. ft.

30 (2) **Open Space.** A minimum percentage of the site shall consist of  
31 open space, as follows:

- 32 (a) In the TR-10 district, a minimum of 70 percent of the site  
33 shall be maintained as open space.  
34 (b) In the TR-3 districts:

(i) In the TR-3LBR sub-district, a minimum of 70 percent of the site shall be maintained as open space.

(ii) In the TR-3UBF and TR-3LF sub-districts, a minimum of 50 percent of the site shall be maintained as open space.

(c) In the TR-2 district, a minimum of 50 percent of the site shall be maintained as open space.

(d) In the TR-1UBF and TR-1LF sub-districts, a minimum of 50 percent of the site shall be maintained as open space.

(3) **Lot and Open Space Standards.** The two elements of the subdivision are (1) the lot area(s) and (2) the open space. The site layout of these elements shall occur during the review of a preliminary plat for subdivision, ~~simultaneously with the analysis and site planning required to comply with Section 6-2000 (Conservation Design).~~ Establishment of the lots and open space on the site shall comply with the following standards:

(a) **Lot Standards.** Lots shall comply with the following standards (see Table 5-701(C)(3)(a)).

TABLE 5-701(C)(3)(a): LOT STANDARDS						
District	Lot Grouping	Min. Size Lot	Min. Front Yard	Min. Rear Yard	Min. Side Yard	Max. Building Height
TR-10	Minimum: 5 Maximum: No maximum Lots of less than 5 acres must be grouped in accord with Section 5-701(C)(3)(a)(ii).	None	20 feet	25 feet	10 feet	35 feet
TR-3LBR	Minimum: 5; Maximum 25	None	12 feet	25 feet	7 feet	35 feet
TR-3LF, TR-3UBF	Minimum: 5; Maximum 25	None	12 feet	25 feet	7 feet	35 feet
TR-2	Minimum: 5; Maximum 25	None	10 feet	25 feet	5 feet	35 feet
TR-1LF, TR-1UBF	Minimum: 5; Maximum 25	None	10 feet	25 feet	5 feet	35 feet

(i) **Lot Yield.** The total number of lots on a site shall not exceed the number permitted to accommodate the base density established by Section 5-701(C)(1), regardless of whether the lot is used for a residential or nonresidential use.

(ii) **Number of Lots in a Group.** Lots that are less than 5 acres in size shall be located in a contiguous group, with adjacent and fronting lots oriented toward each other, as on a street, green or paved square. The number of grouped lots shall consist of a minimum of 5 lots and a maximum of 25 lots with the exception of TR-10, except that a contiguous group may consist of fewer than 5 lots if:

1. There will be fewer than 5 lots on the entire site that are less than 5 acres in size; or
2. It is demonstrated that a grouping of fewer than 5 lots will result in greater amounts of contiguous open space or result in less denigration of features within an environmental overlay district—primary conservation—areas than residential grouping(s) of 5 lots or more.

(iii) **Number of Groups.** A single group shall contain all the lots on a site that are less than 5 acres, where the total number of such lots is 25 or fewer, except that multiple groups may be allowed where:

1. It is demonstrated that multiple groups will result in greater amounts of contiguous open space; or result in less denigration of features within an environmental overlay district—primary conservation—areas; and
2. None of the groups contain fewer than 5 lots, unless allowed as provided in Section 5-701(C)(3)(a)(ii).

(iv) **Dimensional Standards of Lots.**

1. In the TR districts there is no maximum or minimum lot size.
2. The yard requirements for the lots in the TR districts shall comply with the standards established in Table 5-701(C)(3)(a).
3. The maximum building height shall not exceed 35 feet.

(b) ~~**Open Space.** The required percentage of open space on the site shall consist of, in order of priority, (1) primary conservation area lands, and (2) other lands (lands other than primary conservation areas), as follows:~~

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(i) **Primary Conservation Area Lands.** All primary conservation area lands shall be included in the open space and shall comply with the requirements of Section 6 2000 (Conservation Design), Section 4 1600 (MDOD), Section 4 1900 (LOD), Section 4 2000 (RSCOD), and Section 5 1508 (Steep Slope Standards), where applicable. One hundred percent (100%) of the primary conservation area lands protected shall be credited against the open space requirement for the subdivision.

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(ii) **Other Lands.** If all primary conservation area lands constitute less than the required percentage of open space, the balance of the open space shall consist of other lands (lands other than primary conservation areas) on the site, in accord with Section 6 2006(A).

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(iii) **Allowed Uses in Open Space.**

1. The uses allowed on primary conservation area lands are limited to those uses and activities for the respective protected area allowed in the environmental overlay districts or steep slope standards pursuant to Section 4-1600 (MDOD), Section 4 1900 (LOD), Section 4 2000 1500 (FOD) (RSCOD) and Section 5-1508 (Steep Slope Standards) (also see Section 6 2005(A) (Conservation Design));

2. The uses allowed on the open space lands shall be limited to:

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- a. Activities and uses allowed in open space, as defined in this Ordinance;
  - b. In the TR-10 district and TR-3 districts, uses permitted in the Agriculture, Horticulture and Animal Husbandry Use Categories; and
  - c. Easements and improvements for drainage, passive open space, communal sewer systems and septic systems, communal water supply systems, wells and other water supply systems.

Such uses and activities shall be subject to applicable environmental overlay district regulations and steep slope standards.

**(c) Siting of the Open Space and Building Lots.**

- (i) The location of the open space on the site shall be identified consistent with the requirements of Sections 5-701(C)(3)(b) and 6-2006(A).
- (ii) The building lots shall be located on that portion of the site that is outside the open space and within the DDA, and sited consistent with the requirements of Section 6-2006(A).
- (iii) The lots and buildings within the subdivision shall be sited so as to reduce visibility of the lot groups from public rights-of-way and from other lot groups, by using existing topography, vegetation, distance and other factors to minimize impact. Options include siting lots and buildings sufficiently below ridgelines or treelines that the horizon will remain visually defined by the ridgeline or treeline rather than by the rooftops of the buildings, or placing lots and buildings at the far edge of a field as seen from a public right-of-way or other lot group.
- (iv) The residential lot group(s) shall be sited so as to relate to the open space and the other lot groups on the site and on adjacent lands, by maximizing the contiguity of other open space features such as vegetation, and natural features such as stream corridors, floodplains, wetlands, steep slopes, ridges, mountainsides, and wildlife habitat.

~~(D) — Ownership and Maintenance of Conservation Areas and Open Space.~~  
~~The conservation areas in the open space shall be owned and maintained in accordance with the provisions of Section 6-2008.~~

**(E) Homeowners' Association and Responsibilities.**

- (1) If any of the following features are present, the development shall have an incorporated Homeowners' Association ("HOA"). If any of the following areas or improvements are present within the development, the HOA shall have the right and responsibility to maintain the areas or improvements:

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- 1 (a) Common areas within the development, if any, that are not  
2 part of the required open space;  
3 (b) The open space, if owned by the HOA;  
4 (c) Any common recreational facilities;  
5 (d) Private roads, if any, within or serving the development;  
6 (e) Any storm water management ponds or areas;  
7 (f) Fire protection pond(s), dry mains, or other improvements;  
8 (g) Such other common facilities or improvements as may be  
9 designated in the bylaws of the HOA.
- 10 (2) Prior to approval of a record plat for subdivision for the  
11 development:
- 12 (a) The landowner shall submit documents for the creation of  
13 the HOA to the County for review and approval, including  
14 its bylaws, and all documents governing ownership,  
15 maintenance, and use restrictions for common areas,  
16 including a legal description of such areas and a description  
17 of restrictions placed upon the use and enjoyment of the  
18 land.
- 19 (b) The landowner shall agree that the association shall be  
20 established by the landowner or applicant and shall be  
21 operating (with financial subsidization by the owner or  
22 applicant, if necessary) before approval of the first record  
23 plat for the property; and
- 24 (c) Membership in the association shall be automatic  
25 (mandatory) for all purchasers of dwelling units therein and  
26 their successors in title.

27 (F) **Recognizing Protection by Right to Farm Act.** In the TR districts,  
28 record plats and deeds authorized pursuant to this section shall include a  
29 statement that agricultural operations enjoy the protection of the Right to  
30 Farm Act (Va. Code Section 3.1-22.28 et seq.).

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32 **5-702 Rural Hamlet Option.**

- 33 (A) **Purpose and Intent.** The primary purpose of the Rural Hamlet Option is  
34 to provide an alternative to conventional A-3 and A-10 district subdivision  
35 in rural areas. Such clustered development is intended to better harmonize  
36 rural development with surrounding agricultural activities recognizing that  
37 it is the County's primary goal to preserve and enhance farming and  
38 farmland in rural Loudoun by the most feasible, effective, and equitable  
39 methods available. This option is intended to conserve agricultural, forestal  
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1 and open space land, historic and natural features at the time that such land  
2 realizes the development potential currently allowed in the agricultural  
3 zoning district. Such clustered development is intended to permit the  
4 compact grouping of homes located so as to blend with the existing  
5 landscape, such as the rise and fall of the topography, hedgerows and  
6 wooded areas, and to preserve to a greater extent the agricultural, forestal  
7 and visual character of the landscape.

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9 (B) **Rural Hamlet Permitted.** Rural hamlets are permitted in the A-3 and A-  
10 10 districts. The district regulations shall apply to the extent not in conflict  
11 with the regulations contained herein.

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13 (C) **Rural Hamlet Defined.** A rural hamlet is characterized by the  
14 configuration of all or a portion of the density permitted on a tract of land  
15 under the district regulations, into a grouping of small residential lots on a  
16 portion of the tract. More than one rural hamlet may be located on a tract.  
17 A rural hamlet may consist of the following categories of land:

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19 (1) **Hamlet Lots.** Smaller residential lots located in a contiguous  
20 group, with adjacent and fronting lots oriented towards each other  
21 as on a street, a green or a paved square. No fewer than five (5)  
22 and no more than twenty five (25) hamlet lots may be grouped  
23 together as a rural hamlet. Hamlet lots shall have a designated  
24 building area. All land not designated as building area, private  
25 access easements, and road rights-of-way shall be placed in a  
26 permanent open space easement.

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28 (2) **Open Space.** Residual land contiguous to a rural hamlet, which is  
29 subject to a permanent open space easement.

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31 (3) **Hamlet Green/Square.** Land located in the interior of a rural  
32 hamlet, owned in common by hamlet lot owners and which is in a  
33 permanent open space easement.

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35 (4) **Conservancy Lots.** A lot, excluding the hamlet lots, open space  
36 and/or hamlet green/square, which will remain as large parcel(s), the  
37 bulk of which is in permanent open space easement and a portion of  
38 which is designated a building area.

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40 (D) **Permitted Uses.** The following uses are permitted in the various categories  
41 of rural hamlet land. These uses shall supersede the permitted or permissible  
42 uses that would otherwise apply in the underlying zoning district.

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44 (1) **Building Area of Hamlet and Conservancy Lots.**

- (a) Dwelling, single family detached.
- (b) Bed and breakfast homestay.
- (c) Home occupation.
- (d) Guest house.
- (e) Water supply systems.
- (f) Wastewater disposal systems.
- (g) Accessory uses and structures, as per Section 5-101 of this Ordinance.
- (h) Dwelling unit, accessory.

(2) **Open Space Use.** All areas of the tract of land devoted to the Rural Hamlet Option other than the building areas lots and road rights-of-way, shall be subjected to a permanent open space easement. Such open space may be used for the following uses:

- (a) Agriculture, horticulture, forestry, and fishery uses including barns, stables and other structures accessory or incidental to such uses.
- (b) Conservation of open land in its natural state, i.e., woodland, fallow fields, grasslands, wetlands, floodplains, and the like.
- (c) Passive open space or passive recreation, including but not limited to trails, picnic areas, community gardens.
- (d) Active recreation space, including golf courses.
- (e) Equestrian uses of any kind.
- (f) Easements and improvements for drainage, access, sewer or water lines, or other public purposes.
- (g) Stormwater management facilities for the proposed development or for a larger area in compliance with a watershed stormwater management plan.
- (h) Water supply systems.

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(i) Accessory uses, such as swimming pools, tennis courts, and other accessory uses and structures pursuant to Section 5-101.

(j) Sewage disposal systems.

(E) **Minimum Tract Size.** A rural hamlet shall be located on a tract, or portion thereof, at least forty (40) acres in size.

(F) **Lot Requirements.**

(1) **Hamlet Lot.**

(a) **Lot Size.** 10,000 sq. ft. minimum.  
3 acres maximum.

(b) **Building Area.** 5,000 sq. ft. minimum.  
15,000 sq. ft. maximum.

(c) **Lot Width.** 64 feet minimum.  
150 feet maximum.

(d) **Length/Width Ratio.** 6.0:1 maximum.

(e) **Front Yard.** (as defined in Article VIII)

6 feet minimum.  
40 feet maximum,  
provided that all principal  
buildings shall be located  
so that the maximum  
deviation for adjacent  
front facades shall not  
exceed 15 feet, and  
provided further that this  
maximum Front Yard  
requirement shall not  
apply to lots located within  
subdivisions approved  
under the zoning  
ordinance in effect prior to  
June 16, 1993, and subject  
to the provisions of

Section 1-103(H) of this Ordinance.

(f) **Rear Yard.** 20 feet minimum.

(g) **Side Yard.** 8 feet minimum.

(h) **Building Height.** 35 ft. maximum.

(i) **Building side yard restriction line.** Dwellings, guest houses, garages and other such structures shall not trespass into minimum side yards. However, detached garages located at the rear of a lot (i.e., behind the rear building line) and attached to a similar garage on a contiguous lot may be located within the side yard setback.

(2) **Hamlet Green/Square.** Maximum distance between building areas of cluster lots facing across a hamlet green/square: 350 feet.

(3) **Conservancy Lots.**

A-3 District

A-10

(a) **Lot Size.** 10 acres min. 30 acre min.

(b) **Lot Width.** 300 ft. min. 500 ft. min.

(c) **Length/Width Ratio.** 5:1 max. 5.1 max.

(d) **Building Area.** 7,500 sq.ft. min. 15,000 sq.ft. max.

(e) **Front and Side Yard.** 25 feet min.

(f) **Rear Yard.** 20 feet min.

(g) **Building Height.** 35 feet max.

(G) **Determination of Density.** The potential number of hamlet and conservancy dwelling units shall be based on either of the following, at the option of the landowner:

(1) In the A-3 District, one (1) dwelling unit per five (5) net acres. In the A-10 District, one dwelling unit per ten (10) acres.

(2) The number of dwelling units permitted at a minimum lot size of three (3) or ten (10) acres in the A-3 or A-10 zoning districts

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1 respectively is based on topography, floodplain and availability of  
2 septic drainfields. Drainfields shall be submitted to the Loudoun  
3 County Health Department for approval in accord with the Land  
4 Subdivision and Development Ordinance (LSDO).

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6 (3) For each conservancy lot of fifty (50) acres or greater in size, one (1)  
7 additional dwelling unit shall be included in the determination of  
8 density.

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10 (H) **Open Space Requirements.**

- 11 (1) **Minimum Open Space.** The minimum amount of land in a Rural  
12 Hamlet devoted to open space and subject to permanent open space  
13 easements shall be no less than eight-five percent (85%) of the total  
14 land area in the Rural Hamlet. All land not designated as building  
15 areas, private access easements, and rights-of-way for roads shall be  
16 permanent open space.  
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18 (2) **Minimum Open Space Widths Surrounding the Hamlet.** There  
19 shall be a minimum of 200 feet width of land in open space between  
20 the outside boundary of hamlet lot building areas and the tract  
21 boundary. There shall be a minimum of 800 feet between the hamlet  
22 lot building area boundaries of two hamlets on the same tract.  
23 Reduction of these dimensions may be permitted by the Board of  
24 Supervisors (see 5-702(L)), upon recommendation of the Planning  
25 Commission, based upon a finding that due to the topography,  
26 forestation, or presence of prime agricultural soils or environmentally  
27 sensitive areas, such reduction will preserve rural vistas, preserve  
28 farmland, screen dwellings from existing roads or adjacent  
29 properties, or preserve environmentally sensitive areas.  
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31 (3) **Maximum Hamlet Building Area Depth.** The outside boundaries  
32 of the building areas of hamlet lots facing one another across a street  
33 shall not exceed 300 feet. The outside boundaries of the building  
34 areas of hamlet lots facing one another across a hamlet green/square  
35 shall not exceed 550 feet.  
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38 (I) **Utilities and Public Facilities Requirements.**

- 39 (1) **Water.** Hamlet lots shall be served either by:  
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41 (a) Individual wells on or off each lot, or  
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43 (b) A communal water system constructed by the developer, or  
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1 (c) A municipal water system if located within an area  
2 designated for such connection in the Comprehensive Plan,  
3 or  
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5 (d) Connection with an existing rural village or other public  
6 water system.  
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8 All water systems shall comply with applicable town,  
9 County, State, and/or LCSA standards and requirements,  
10 including a commission permit if required by applicable law.  
11 As for (a) and (b) above, the Health Department approval of  
12 both a safe and adequate water supply system and designated  
13 backup well sites based on hydrogeological studies, shall be a  
14 precondition to recordation of a record plat establishing a  
15 rural hamlet.  
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17 (2) **Wastewater.** Hamlet lots shall be served either by:  
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19 (a) Individual septic tank drainfields located on or off the lot, or  
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21 (b) A communal wastewater treatment system constructed by the  
22 developer, or  
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24 (c) A municipal wastewater system, if located within an area  
25 designated for such connection in the Comprehensive Plan;  
26 or  
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28 (d) Connection with an existing rural village or other public  
29 wastewater treatment system.  
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31 All wastewater systems shall comply with applicable town,  
32 County, State, and LCSA standards and requirements,  
33 including a commission permit if required by applicable law.  
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35 (3) **Fire Protection.** Every hamlet shall satisfy the fire protection  
36 standards set forth in the Facilities Standards Manual, or if no such  
37 standards are in effect, shall have all weather access road for a pump  
38 truck to an adequate pond with a water withdrawal main or to a water  
39 tank of sufficient capacity for fire protection.  
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41 (4) **Roads.** Seven (7) rural hamlet lots or less may be served by a  
42 private access easement. Twenty-five (25) rural hamlet lots or less  
43 may be served by a VDOT fixed generation, tertiary Class II road.  
44 All other roads shall be VDOT Class II roads. All other Rural  
45 Hamlet roads shall be built to VDOT secondary road standards.

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1 Roads serving two or more hamlets, with a combined traffic  
2 loading exceeding 250 vehicles per day, shall generally have two  
3 (2) access points to the existing rural road network.

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5 (a) The Planning Commission may waive the two (2) access  
6 requirement upon finding special topographic or other  
7 circumstances which preclude implementation, but may in  
8 this eventuality require alternative configurations of road  
9 design, such as a divided median.

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11 (b) Further, the Planning Commission may waive the public road  
12 standards, thereby allowing up to twenty-five (25) rural  
13 hamlet lots to be served by private access easements, should  
14 the Planning Commission find that the waiver provisions  
15 contained in this section are met. This alternative roadway  
16 design option must be requested as part of the subdivision  
17 application, and shall not be granted for the sole purpose of  
18 circumventing the previously referenced public roadway  
19 design criteria. In reviewing any proposed waiver, the  
20 Planning Commission shall consider the following:

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22 (i) Whether granting of the proposed waiver will  
23 adequately provide for access by public safety service  
24 (police, fire and rescue services).

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26 (ii) Whether granting of the proposed waiver will protect  
27 to the greatest extent possible topographic or physical,  
28 natural, scenic, archaeological or historical features of  
29 significant importance.

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31 (iii) Whether the granting of the proposed waiver will be  
32 in the public's best interest, specifically with regard to  
33 future road maintenance considerations.

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35 (iv) Whether the granting of the proposed waiver will  
36 meet engineering standards with regard to steep  
37 slopes, storm water control, drainage, soil erosion  
38 control; mitigate floodplain impacts; assure adequate  
39 dust control measures; and will minimize, to the  
40 greatest extent possible, the impact on water and air  
41 quality on adjoining properties.

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43 (v) Whether the granting of the proposed waiver will  
44 facilitate orderly and safe road development.  
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(vi) Whether the granting of the proposed waiver will minimize the impact of traffic on the existing roadway network.

(vii) Waiver requests shall be considered by the Planning Commission at a public meeting held within sixty (60) days of receipt of such request.

(5) **Parking.** Every hamlet lot shall include sufficient parking (which may or may not be paved) to accommodate four (4) cars.

(J) **Home Owner's Association.**

(1) Each rural hamlet or group of rural hamlets comprising a common development shall have an incorporated Home Owner's Association ("HOA") which shall have the right and responsibility to maintain the following areas and improvements:

(a) Common open space.

(b) Private roads, if any, within or serving the rural hamlet.

(c) Any stormwater management ponds or areas,

(d) Fire protection pond, dry mains, or other improvements; and

(e) Such other common facilities or improvements as may be designated in the HOA Bylaws.

(2) Easements for septic drainfields and wells located off of the lot shall be established at the time of the record plat for such lot, and shall run to the benefit of the lot served. The responsibility for maintaining or replacing such septic fields or wells shall be borne by the lot owner served by such easement.

(3) The permanent open space easement required in the rural hamlet shall be enforced by the County. Such easement shall be in a form approved by the County, and shall provide that, notwithstanding such easement, the eased portion of conservancy lots or hamlet lots shall be maintained by the owners of such lots, and that the County should bear no responsibility or liability for such maintenance. However, nothing contained herein shall prevent such landowners from leasing such open space for agricultural or other purposes as allowed in Section 5-702(D)(2) Open Space Use.

1 (4) The Home Owner's Association documents shall be submitted as part  
2 of the initial record plat application and shall provide for adequate  
3 initial funding and assessments to fund the maintenance of common  
4 property and improvements.

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6 (K) **Plat and Deed Notations.** Record plats and deeds for rural hamlet  
7 subdivisions shall include a statement that agricultural operations enjoy the  
8 protection of the Right to Farm Act, Va. Code Section 3.1-22.28 et seq.

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10 (L) **Modification of Regulations.**

11 (1) Where there are conflicts between the rural hamlet provisions herein  
12 and the general zoning, subdivision or other regulations and  
13 requirements, the rural hamlet regulations shall apply.

14 (2) In addition, the Board of Supervisors may allow reasonable  
15 modifications to other applicable regulations as follows:

16 (a) These other regulations serve public purposes to a lesser  
17 degree than the rural hamlet, or

18 (b) The designs or solutions proposed by the applicant, although  
19 not literally in accord with these other regulations, satisfy  
20 public purposes to a greater degree, or

21 (c) The strict implementation of these other regulations would  
22 prevent well designed rural hamlet development.

23 Such modifications may be granted by the Board of Supervisors by  
24 special exception. Such modifications may be sought prior to filing  
25 a preliminary plan of subdivision. The landowner shall include a  
26 sketch plan of the proposed hamlet as part of the application for  
27 modification and shall demonstrate the reasons for the request.

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29 (M) **Advisory Rural Hamlet Siting and Design Guidelines.** Loudoun County  
30 recognizes that every rural hamlet design will be a custom response to the  
31 unique assets and constraints of each tract. As a consequence, the County  
32 has only incorporated in the Rural Hamlet Ordinance those siting and design  
33 rules required to preserve open space and to allow the clustering of  
34 dwellings. However, the County does wish to encourage design consistent  
35 with Loudoun's past in rural Loudoun and appends the following general  
36 design guidelines as a suggestion to rural hamlet designers.




37 (1) **Siting.** Rural hamlets should be sited so as to nestle, or blend in a  
38 subordinate way, into the existing landscape. Rural hamlets should  
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1 not be placed on the crest of a ridge but rather should be located in a  
2 dip or depression or on the side of a hill.

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4 (2) **Landscaping.** Rural hamlet designs should incorporate a mix of  
5 evergreen trees, generally located to the north and west for winter  
6 wind protection, and deciduous trees, located to the west and south,  
7 for summer shade. Given the time required for trees to attain  
8 maturity, existing stands of trees and hedgerows should be  
9 incorporated in the new hamlets whenever possible. New plantings  
10 of evergreen and deciduous trees should be native to the northern  
11 Piedmont, such as yellow poplar, northern red and white oak,  
12 hickory, white ash, black gum, hemlock, spruce and eastern red cedar  
13 among others.
- 14 (3) **Ground Modeling and Screening.** In those circumstances where  
15 natural contours, subsurface conditions and tract boundaries prevent  
16 discreet hamlet placement, hamlet designers should seek to reduce  
17 the development's apparent presence by locating earth berms near  
18 adjacent roadways and/or planting screens of trees adjacent to  
19 existing roads and tract boundaries.
- 20 (4) **Grouping of Structures.** Dwellings in rural hamlets should be  
21 placed in proximity to one another and to common wells or facilities.  
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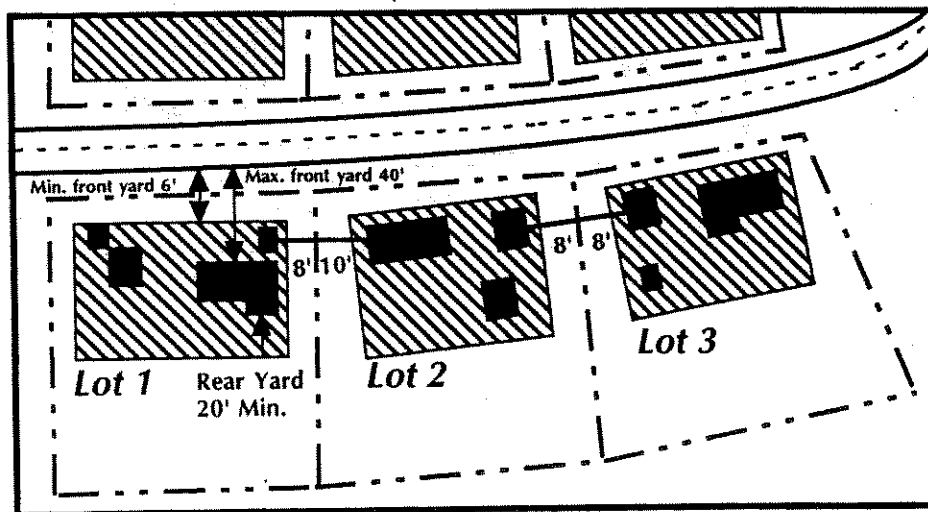


## Illustration of Hamlet Lot and Building Area

-  Hamlet Building Area  
(min. 1/6 ac. max. 1/4 acre)
-  Structure located on  
Hamlet Lot Building Area
-  Hamlet Lot  
Eased Open Space

*NOTE: For Illustrative Purposes only-*

*Refer to Ordinance Text for Requirements*



Minimum lot size 10,000 sq. ft.

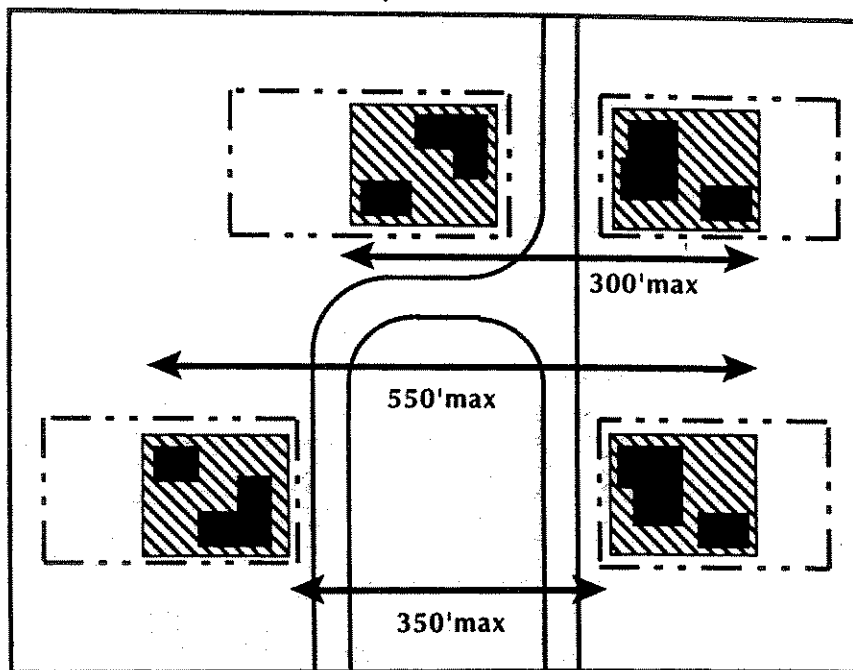
Section 5-700  
Revision Date: June 17, 1998  
Loudoun County Zoning Ordinance

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## Example of Maximum Widths in Rural Hamlets

*NOTE: For Illustrative Purposes only-*

*Refer to Ordinance Text for Requirements*



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## Example of Hamlet Calculations and Ratios

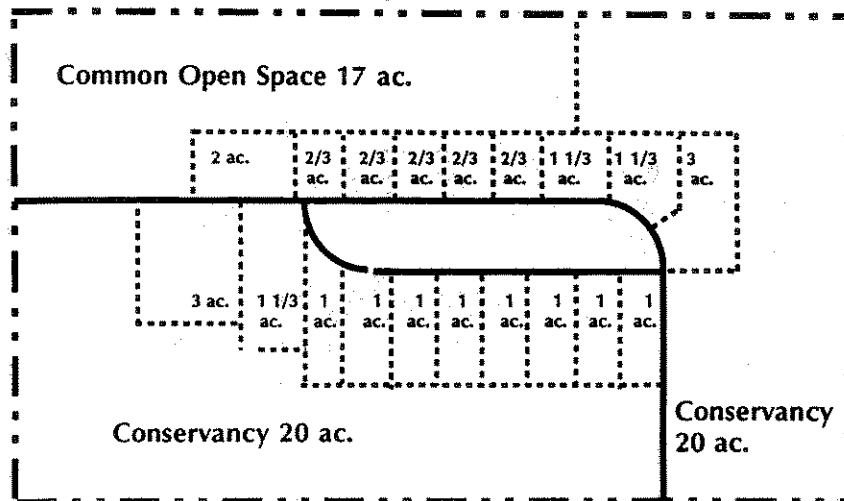
**Figure 1. Hamlet Example Summary**

88 ac. / 20 Hamlet and 2 Conservancy lots

90.34% All eased land

*NOTE: For Illustrative Purposes only-*

*Refer to Ordinance Text for Requirements*





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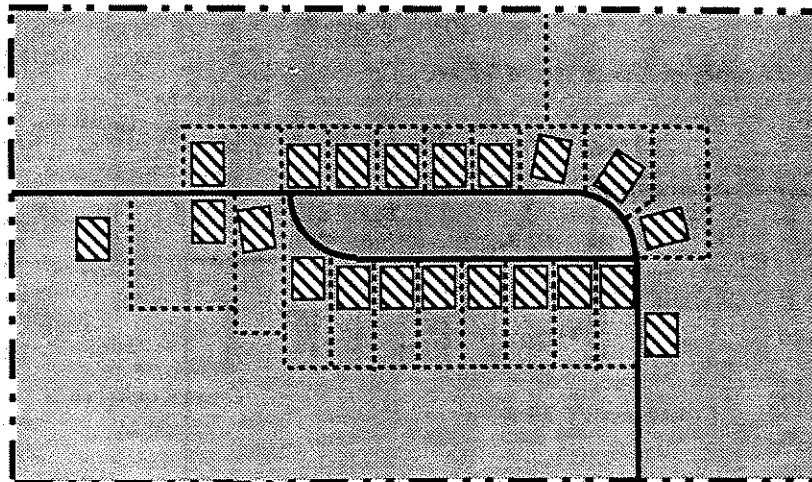
## Example of Hamlet Calculations and Ratios

**Figure 2. Illustrations of Eased Land and Building Areas in Hamlet**

-  Eased area of Conservancy and Hamlet Lots and Common Open Space
-  Designated Building Areas

*NOTE: For Illustrative Purposes only-*

*Refer to Ordinance Text for Requirements*



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1        **~~5-703 Agricultural Rural (AR) District Cluster Option.~~**

2        ~~(A) **Purpose.** The purpose of the Agricultural Rural (AR) District Cluster~~  
3        ~~Option is to provide for residential single family detached development in~~  
4        ~~the AR 1 and AR 2 districts that addresses conservation design standards,~~  
5        ~~accommodates rural economy uses and ensures the form and character of~~  
6        ~~residential development is consistent with the open character of the rural~~  
7        ~~economy uses.~~

8        ~~(B) **General Requirements.** The requirements established in the following~~  
9        ~~sections set forth the general and specific standards for development under~~  
10       ~~the AR District Cluster Option.~~

11       ~~(1) **General.** A landowner may exercise the residential cluster option:~~

12                ~~(a) In the AR 1 district: on a site consisting of a minimum of~~  
13                ~~30 contiguous acres.~~

14                ~~(b) In the AR 2 district: on a site consisting of a minimum of~~  
15                ~~60 contiguous acres.~~

16                ~~For the purposes of this section, contiguous land ownership is not~~  
17                ~~broken by a road or a public or private right of way or easement.~~

18        ~~(2) **Density/Clustering.** Under this AR cluster option, the residential~~  
19        ~~development on the site shall be clustered according to the~~  
20        ~~provisions of this section, and the maximum number of lots shall~~  
21        ~~be:~~

22                ~~(a) AR 1 district: 1 lot per 10 acres, including the Rural~~  
23                ~~Economy Conservation Lands lot.~~

24                ~~(b) AR 2 district: 1 lot per 20 acres, including the Rural~~  
25                ~~Economy Conservation Lands lot.~~

26                ~~Accessory dwelling units and guest houses shall not be counted as~~  
27                ~~dwelling units in the density calculation.~~

28        ~~(3) **Rural Economy Conservation Lands.** A minimum percentage of~~  
29        ~~the site shall consist of Rural Economy Conservation Lands;~~  
30        ~~subject to a conservation easement precluding further subdivision,~~  
31        ~~as follows:~~

32                ~~(a) AR 1 district: 70 percent.~~

33                ~~(b) AR 2 district: 85 percent.~~

34        ~~(C) **Residential Cluster and Rural Economy Conservation Lands**~~  
35        ~~**Standards.** The two elements of the residential cluster option are (1) the~~  
36  
37  
38

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1 residential cluster and (2) the Rural Economy Conservation Lands lot.  
2 The site layout of these elements shall occur during the review of a  
3 preliminary plat for subdivision, simultaneously with the analysis and site  
4 planning required to be undertaken to comply with Section 6 2000  
5 (Conservation Design). Development of the residential cluster and the  
6 Rural Economy Conservation Lands shall comply with the following  
7 standards:

8 (1) ~~Residential Clusters.~~ Clusters and lots within clusters shall  
9 comply with the following standards, except as exempted by  
10 Section 5 703(C)(1)(e).

11 (a) ~~Number of Lots in Cluster(s).~~ Residential cluster(s) shall  
12 consist of a minimum of 5 lots and a maximum of 25 lots;  
13 except that a cluster may consist of fewer than 5 lots if:

- 14 (i) There will be fewer than 5 lots on the entire site that  
15 is to be developed under the cluster option;  
16 (ii) In the AR 1 district, the area of the site is less than  
17 50 acres; or  
18 (iii) It is demonstrated that a cluster of fewer than 5 lots  
19 will result in greater amounts of contiguous Rural  
20 Economy Conservation Lands or result in less  
21 denigration of primary conservation areas.

22 (b) ~~Number of Clusters.~~ Multiple clusters shall be required  
23 where the total number of lots on a site is greater than 25. A  
24 single cluster shall contain all the lots where the total  
25 number of lots on a site is 25 or fewer, except that multiple  
26 clusters may be allowed where:

- 27 (i) It is demonstrated that multiple clusters will result  
28 in greater amounts of contiguous Rural Economy  
29 Conservation Lands or result in less denigration of  
30 primary conservation areas; and  
31 (ii) None of the clusters contains fewer than 5 lots;  
32 unless allowed as provided in Section 5  
33 703(C)(1)(a) above.

34 (c) ~~Dimensional Standards of Lots Within Cluster(s).~~

- 35 (i) The area of any individual residential cluster lot  
36 shall not exceed 3 acres, except common open  
37 space owned by an HOA may exceed the 3-acre  
38 maximum lot size.  
39 (ii) There is no minimum lot size for a residential lot in  
40 the cluster(s).

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(iii) ~~Residential structures within the cluster shall be set back a minimum of 100 feet from any lot line adjoining an agricultural, horticultural, or animal husbandry use.~~

(iv) ~~The residential cluster lots shall be located in a contiguous group, with adjacent and fronting lots oriented towards each other as on a street or along a common area.~~

(d) ~~**One Dwelling Unit on a Lot.** The only principal use on each residential cluster lot, except the Rural Economy Conservation Lands lot, shall be one single family detached dwelling unit, and any accessory uses (including communal systems) allowed for the single family detached unit under this Ordinance.~~

(e) ~~**HOA Common Area.** In addition to the number of lots permitted above, a common open space area owned by an HOA may be provided within the DDA, created pursuant to Section 6 2000.~~

(2) ~~**Rural Economy Conservation Lands Lot.** The required percentage of Rural Economy Conservation Lands on the site shall include primary conservation area lands and other lands, as may be necessary to meet the required percentage. The Rural Economy Conservation Lands shall be designed to be contiguous, and shall be included within one lot. Such lot shall be counted against the maximum number of lots permitted.~~

(a) ~~**Allowed Uses on Rural Economy Conservation Lands.** The following uses are allowed on the Rural Economy Conservation Lands:~~

(i) ~~The uses allowed on primary conservation area lands on the Rural Economy Conservation Lands are limited to those uses and activities for the respective protected area allowed in the environmental overlay districts or steep slope standards pursuant to Section 4 1600 (MDOD), Section 4 1900 (LOD), Section 4 1500 (FOD) 2000 (RSCOD) and Section 5 1508 (Steep Slope Standards).~~

(ii) ~~The uses allowed on the other Rural Economy Conservation Lands are limited to those uses specified below which are subject to the Additional Regulations for Specific Uses in Section 5 600:~~

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- ~~1. One single family detached unit (including accessory uses such as an accessory apartment) is permitted, in association with on going agricultural uses. It shall be calculated as part of the density allowed on the site under the cluster option.~~
- ~~2. Permitted Agriculture, Horticulture and Animal Husbandry Uses.~~
- ~~3. Permitted Agriculture Support and Services uses related to Agricultural, Horticulture and Animal Husbandry.~~
- ~~4. Permitted Group Living uses (except co-housing and rooming houses).~~
- ~~5. Permitted Conference and Training Center uses.~~
- ~~6. Agricultural Cultural Center and Fairgrounds uses.~~
- ~~7. Permitted Commercial Uses.~~
- ~~8. Uses and structures accessory to those uses allowed to be developed on Rural Economy Conservation Lands pursuant to this subsection, consistent with the limitations of the accessory use standards.~~
- ~~9. Easements and improvements for drainage.~~
- ~~10. Passive open space.~~
- ~~11. Communal sewer systems and septic systems.~~
- ~~12. Communal water supply systems, wells, and other water supply systems.~~
- ~~13. HOA structure(s) if the Rural Economy Conservation Land is owned as common open space by the HOA.~~

~~(3) Cluster Development Relationships.~~

- (a) ~~**Visual Compatibility.** The lots and buildings of the residential cluster(s) shall be sited so as to reduce visibility of the cluster(s) from public rights of way and from other cluster(s), by using existing topography, vegetation, distance and other factors to minimize impact. Options include siting lots and buildings sufficiently below~~

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ridgelines or treelines that the horizon will remain visually defined by the ~~ridgeline or treeline rather than by the rooftops of the cluster, or placing lots and buildings at the far edge of a field or pasture as seen from a public right of way or other cluster so that the view remains defined by an open and rural character.~~

- (b) ~~**Contiguity of Rural Economy Conservation Lands.**~~ The Rural Economy Conservation Lands lot shall be designed to maximize, to the extent feasible, the ~~contiguity of such lands with other Rural Economy Conservation Lands off-site.~~

(D) ~~**Utility Requirements.**~~

- (1) ~~**Water.**~~ Residential lots may be served with individual wells or by communal water supply systems. ~~Such wells and water supply systems or their components may be located on or off the individual lot, and may be located within the Rural Economy Conservation Lands consistent with the standards of this section and Section 6-2005.~~

- (2) ~~**Wastewater.**~~ Residential lots may be served by communal sewer systems or by septic systems. ~~Such systems and their components may be located on or off the individual lot, and may be located within the Rural Economy Conservation Lands consistent with the standards of this section and Section 6-2005.~~

- (E) ~~**Fire Protection.**~~ The residential cluster shall satisfy the fire protection standards set forth in the Facilities Standards Manual, or if no such standards are in effect, shall have an all-weather access road for a pump truck to an adequate pond with a water withdrawal main or to a water tank of sufficient capacity for fire protection as determined by the Director of Building and Development.

- (F) ~~**Roads.**~~ The residential cluster lots may be served by a private access easement with gravel road surfaces that comply with standards contained in the Facilities Standards Manual.

- (G) ~~**Ownership and Maintenance of Rural Economy Conservation Lands.**~~ The primary conservation areas and other lands on the Rural Economy Conservation Lands shall be owned and maintained in accordance with the provisions of Section 6-2008.

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1                    ~~(H) Homeowners' Association and Responsibilities.~~

2                    ~~(1) The cluster development shall have an incorporated Homeowners'~~  
3                    ~~Association ("HOA") if any of the following areas or~~  
4                    ~~improvements are present within the cluster development. The~~  
5                    ~~HOA shall have the right and responsibility to maintain the areas~~  
6                    ~~or improvements.~~

- 7                    ~~(a) Common areas within the cluster, if any, that are not part of~~  
8                    ~~the required Rural Economy Conservation Lands;~~  
9                    ~~(b) The Rural Economy Conservation Lands, if owned by the~~  
10                   ~~HOA;~~  
11                   ~~(c) Private roads, if any, within or serving the cluster~~  
12                   ~~development;~~  
13                   ~~(d) Any stormwater management ponds or areas;~~  
14                   ~~(e) Fire protection pond(s), dry mains, or other improvements;~~  
15                   ~~(f) Such other common facilities or improvements as may be~~  
16                   ~~designated in the bylaws of the HOA.~~

17                   ~~(2) Prior to approval of a record plat for subdivision for the cluster:~~  
18

- 19                   ~~(a) The landowner shall submit documents for the creation of~~  
20                   ~~the HOA to the County for review and approval, including~~  
21                   ~~its bylaws, and all documents governing ownership,~~  
22                   ~~maintenance, and use restrictions for common areas,~~  
23                   ~~including a legal description of such areas and a description~~  
24                   ~~of restrictions placed upon the use and enjoyment of the~~  
25                   ~~land.~~  
26                   ~~(b) The landowner shall agree that the association shall be~~  
27                   ~~established by the landowner or applicant and shall be~~  
28                   ~~operating (with financial subsidization by the owner or~~  
29                   ~~applicant, if necessary) before approval of first record plat~~  
30                   ~~for the property; and~~  
31                   ~~(c) Membership in the association shall be automatic~~  
32                   ~~(mandatory) for all purchasers of dwelling units therein and~~  
33                   ~~their successors in title.~~

34  
35                   ~~(I) Recognizing Protection by Right to Farm Act. Record plats and deeds~~  
36                   ~~authorized pursuant to this section shall include a statement that~~  
37                   ~~agricultural operations enjoy the protection of the Right to Farm Act (Va.~~  
38                   ~~Code Section 3.1-22.28 et seq.) on the Rural Economy Conservation~~  
39                   ~~Lands.~~

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1  
2 **~~5-704 Common Open Space for Permitted Urban Clusters as permitted in various~~**  
3 **~~sections contained in Article III and Article IV of this Zoning Ordinance.~~**  
4

5 ~~(A) Common open space shall be designed to constitute a contiguous and~~  
6 ~~cohesive unit of land which may be used for active or passive recreation by~~  
7 ~~residents.~~  
8

9 ~~(B) Common open space shall be accessible to all permitted uses and all~~  
10 ~~residential units within the subject development and shall be located~~  
11 ~~within a reasonable walking distance of such units.~~  
12

13 ~~(C) All common open space shall be permanently reserved, managed, and~~  
14 ~~maintained as open space by a means acceptable to the Board of~~  
15 ~~Supervisors, and at no cost to the County.~~  
16

17 ~~(D) No major floodplain shall be included in calculating the amount of common~~  
18 ~~open space required.~~  
19  
20

## SECTION 5-1204(D) - SIGN REQUIREMENTS MATRIX

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PAGE 1

LAND USE/ SIGN CATEGORY (or similar) (See Note 6)	Ground Mounted Sign			Ground Mounted Structure			Additional Requirements						
	Total Aggregate Sign Area	Max. Number of Signs	Max. Area of Any One Sign	Bonus Multiplier	Max. Area of Any One Sign	Bonus Multiplier (See Note 1)	Max. Area of Backround Structure	Max. Height of Backround Structure	Illumination Permitted	Min. Setback From R.O.W. (See Note 2)	Type Permitted (See Note 2)	Max. Height (See Note 3)	Additional Requirements
(1) RESIDENTIAL/AGRICULTURE SIGNS													
(a) PD-H and PD-AAAR Entrance Signs		2/ vehicular entrance	60 SF			2	120 SF	5 FT	Backlight or White Light	10 FT	Ground Mounted	5 FT	One sided only; signs shall contain no advertising.
(b) PD-H - Community Directional Signs - On-site or Off-site (within boundaries of approved PD-H district)	20 SF		20 SF						Backlight or White Light	5 FT	Ground Mounted	8 FT	Minimum 1000 FT between signs on same side of road or at intersection; signs shall contain no advertising.
(c) Non PD-H Residential Communities - Entrance Signs	10 SF	1/ community	10 SF			4	40 SF	5 FT	None	10 FT	Ground Mounted	5 FT	One sided only; signs shall contain no advertising.
(d) HOA Activity Signs	20 SF	1/development of 2500 or fewer dwellings- 2/developments of over 2500 dwellings	20 SF						Backlight or White Light	5 FT	Ground Mounted	8 FT	Signs shall be separated by a minimum half-mile radius; signs shall contain no advertising.
(e) Farm Signs	40 SF	2/Farm	20 SF						None	5 FT 0 FT	Freestanding As Permitted in Section 5-1202(A)(3)	8 FT	

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## SECTION 5-1204(D) - SIGN REQUIREMENTS MATRIX

SECTION 3-1204(D) - SIGN REQUIREMENTS AND REGULATIONS

LAND USE/ SIGN CATEGORY (or similar) (See Note 6)	Ground Mounted Sign			Ground Mounted Background Structure			Illumination Permitted	Min. Setback From R.O.W. (See Note 2)	Type Permitted	Max. Height (See Note 3)	Additional Requirements	
	Total Aggregate Sign Area	Max. Number of Signs	Max. Area of Any One Sign	Bonus Multiplier	Max. Area of Any One Sign	Bonus Multiplier (See Note 1)						Max. Area of Background Structure
(1) RESIDENTIAL/AGRICULTURE SIGNS (Continued)												
(f) Wayside Stands, including Christmas Tree Sales, Vineyards, Wineries	2 SF	6, includes up to 3 on-site signs and up to 4 off-site directional signs	12 SF on-site 4 SF off-site	One on-site sign at 20 SF if setback ≥ 40 FT from the fronting ROW				None	5 FT	Freestanding Building Mounted	8 FT	Displayed when agricultural produce and livestock are available for sale on farm involved and shall be removed within 48 hours after sale is concluded. Off-site signs require written permission of the owner of the land on which it is displayed.
(g) Home Occupation	2 SF	1/lot	2 SF					None	5 FT	Freestanding Building Mounted	4 FT 8 FT	
(h) Childcare Home	2 SF	1/lot	2 SF					None	5 FT	Freestanding Building Mounted	4 FT 8 FT	
(i) Residential Name Signs		1/vehicular access, 2 for each dwelling lot or property	2 SF					None	None	Freestanding Building Mounted As Permitted in Section 5-1202(A)(3)	4 FT 8 FT	Signs shall contain no advertising.

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SECTION 5-1204(D) - SIGN REQUIREMENTS MATRIX

SECTION 3-1204(D) - SIGN REQUIREMENTS TO BE ADOPTED

LAND USE/ SIGN CATEGORY (or similar) (See Note 6)	Ground Mounted			Ground Mounted			Ground Mounted			Additional Requirements			
	Total Aggregate Sign Area	Max. Number of Signs	Max. Area of Any One Sign	Bonus Multiplier	Max. Area of Any One Sign	Bonus Multiplier (See Note 1)	Max. Area of Background Structure	Max. Height of Background Structure	Illumination Permitted	Min. Setback From R.O.W. (See Note 2)	Type Permitted	Max. Height (See Note 3)	
(2) PUBLIC/QUASI PUBLIC SIGNS													
(a) Public or Quasi-Public Facility	6 SF	1/ use	6 SF	1.5	9 SF	2	18 SF	4 FT	None	10 FT	Freestanding	4 FT	Must be located within 100 FT from use or structure it identifies; signs shall contain no advertising.
(b) School, Hospital, College, Library, and Publicly Owned Community Center	20 SF	1/ use	20 SF	1.5	30 SF	2	60 SF	4 FT	Backlight or White Light	10 FT	Freestanding Building Mounted	8 FT Roofline	Signs shall contain no advertising.
(c) Places of Worship	20 SF	2	10 SF			1.5	15 SF	8 FT	Backlight	5 FT	Freestanding Building Mounted	8 FT Roofline	Signs shall contain no advertising.
(d) Church Bulletin Board	15 SF		15 SF						Backlight or White Light	5 FT	Freestanding Building Mounted	8 FT	
(3) COMMERCIAL/OFFICE SIGNS													
(a) (PD-CC(NC)) Planned Development Neighborhood Center - Entrance Signs	30 SF	1/vehicular entrance, no more than 2 signs	20 SF	1.5	30 SF	1.5	45 SF	8 FT	Backlight or White Light	10 FT	Freestanding	15 FT	
(b) (PD-CC(NC)) Planned Development Neighborhood Center - Tenant Signs	2 SF/ linear foot of building frontage	1/facade, no more than 3 signs	60 SF						Backlight or White Light		Building Mounted	Roofline	

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## SECTION 5-1204(D) - SIGN REQUIREMENTS MATRIX

SECTION 5-1204(D) - SIGN REQUIREMENTS MATRICES

LAND USE/ SIGN CATEGORY (or similar) (See Note 6)	Ground Mounted			Ground Mounted Structure			Additional Requirements						
	Total Aggregate Sign Area	Max. Number of Signs	Max. Area of Any One Sign	Sign		Background Structure		Illumination Permitted	Min. Setback From R.O.W. (See Note 2)	Type Permitted	Max. Height (See Note 3)	Additional Requirements	
				Bonus Multiplier	Max. Area of Any One Sign	Bonus Multiplier (See Note 1)	Max. Area of Background Structure						Max. Height of Background Structure
(3) COMMERCIAL/OFFICE SIGNS (Continued)													
(c) (PD-CC(CC)) Planned Development Community Center - Entrance Signs and Entrance Signs for Commercial Developments in PD-TC, PD-TT, PD-UC PD-TRC, PD-TREC PD-RV and PD-CV Districts	60 SF	1/vehicular entrance, no more than 3 signs	20 SF	1.5	30 SF	1.5	45 SF	8 FT	Backlight or White Light	10 FT	Freestanding	15 FT	
(d) (PD-CC(CC)) Planned Development Community Center - Tenant Signs and Tenant Signs for Business in PD-TC PD-TT, PD-UC, PD-TREC PD-TRC, PD-RV, PD-CV Districts	2 SF/ linear foot of building frontage, not to exceed 60 SF	1/facade, no more than 3 signs	60 SF						Backlight or White Light		Building Mounted	Roofline	
(e) (PD-CC(SC) & (RC)) Planned Development Small Regional Center and Regional Center - Entrance Signs		1/vehicular entrance	60 SF	1.25 2 (for centers over 1 million SF)	75 SF 120 SF	1.33 1.33	100 SF 160 SF	15 FT	Backlight or White Light	10 FT	Freestanding	15 FT	
(f) (PD-CC(SC) & (RC)) Planned Development Small Regional Center and Regional Center - Tenant Signs (Freestanding Building with up to 4000 SF floor area)	60 SF	1/facade, no more than 3 signs	20 SF	1.5	30 SF	1.5	45 SF	8 FT	Backlight	10 FT	Freestanding Building Mounted	15 FT Roofline	

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SECTION 5-1204(D) - SIGN REQUIREMENTS MATRIX

SECTION 5-1204(D) - SIGN REQUIREMENTS MATRIX

LAND USE/ SIGN CATEGORY (or similar) (See Note 6)	Ground Mounted Sign			Ground Mounted Background Structure			Additional Requirements						
	Total Aggregate Sign Area	Max. Number of Signs	Max. Area of Any One Sign	Bonus Multiplier	Max. Area of Any One Sign	Bonus Multiplier (See Note 1)	Max. Area of Background Structure	Max. Height of Background Structure	Illumination Permitted	Min. Setback From R.O.W. (See Note 2)	Type Permitted	Max. Height (See Note 3)	Additional Requirements
(3) COMMERCIAL/OFFICE SIGNS (Continued)													
(l) Office - Freestanding Building Entrance Sign	60 SF	1/vehicular entrance	20 SF	1.5	30 SF	1.5	45 SF	8 FT	Backlight or White Light	10 FT	Freestanding	8 FT	
(m) Office - Building ID Sign (1-3 stories)	160 SF	1/facade	40 SF						Backlight		Building Mounted	Roofline	Sign must be located at the top floor of building, otherwise max. area of sign is 20 SF. Name and message of signs on each façade must be the same.
(n) Office - Building ID Sign (4-5 stories)	200 SF	1/facade	50 SF						Backlight		Building Mounted	Roofline	Sign must be located at top floor of building, otherwise max. area of sign is 20 SF. Name and message of signs on each façade must be the same.
(o) Office - Building ID Sign (6 + stories)	240 SF	1/facade	60 SF						Backlight		Building Mounted	Roofline	Sign must be located at top floor of building, otherwise max. area of sign is 20 SF. Name and message of signs on each façade must be the same.

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## SECTION 5-1204(D) - SIGN REQUIREMENTS MATRIX

SECTION 3-1204(D) SIGN REQUIREMENTS

LAND USE/ SIGN CATEGORY (or similar) (See Note 6)	Ground Mounted		Ground Mounted Background Structure			Additional Requirements							
	Total Aggregate Sign Area	Max. Number of Signs	Max. Area of Any One Sign	Bonus Multiplier	Max. Area of Any One Sign	Bonus Multiplier (See Note 1)	Max. Area of Background Structure	Max. Height of Background Structure	Illumination Permitted	Min. Setback From R.O.W. (See Note 2)	Type Permitted (See Note 2)	Max. Height (See Note 3)	Additional Requirements
(3) COMMERCIAL/OFFICE SIGNS (Continued)													
(p) Office - Related Commercial (Ground Floor)	2 SF per linear foot of building frontage (counts against overall building ID sign)	1/tenant	20 SF						Backlight		Building Mounted		Located over entrance of business it identifies. Max. ht. of letters 24 inches.
(q) Office - Directories													May not be visible from outside the building.
(r) Auto Service Station (including convenience store, car wash & repair)	60 SF	6	20 SF	1.5	30 SF	1.5	45 SF	8 FT	Backlight	5 FT	Freestanding Building Mounted	15 FT Roofline	Total sign area excludes federally mandated gasoline price posting.
(s) Auto Dealer	20-120 SF (see additional requirements column)	6	20 SF	1.5	30 SF	1.5	45 SF	8 Ft	Backlight	10 FT	Freestanding	15 FT Roofline	Base sign 20 SF Used car 20 SF Each new car dealership = 20 SF
(t) Bed & Breakfast Inn and Homestay	4 SF	2	4 SF						Backlight or White Light	5 FT	Freestanding Building Mounted	6 FT Roofline	
(u) Country Inn, Guest Farm or Ranch, Rural Retreat, Rural Resort, and Rural Agricultural Corporate Retreat	10 SF	2	10 SF						Backlight or White Light	None	Freestanding Building Mounted in Historic District Only	6 FT	

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SECTION 5-1204(D) - SIGN REQUIREMENTS MATRIX

LAND USE/ SIGN CATEGORY (or similar) (See Note 6)	Ground Mounted			Ground Mounted			Ground Mounted			Additional Requirements				
	Total Aggregate Sign Area	Max. Number of Signs	Max. Area of Any One Sign	Bonus Multiplier	Max. Area of Any One Sign	Bonus Multiplier (See Note 1)	Max. Area of Background Structure	Max. Height of Background Structure	Illumination Permitted	Min. Setback From R.O.W. (See Note 2)	Type Permitted	Max. Height (See Note 3)		
(3) COMMERCIAL/OFFICE SIGNS (Continued)														
(v) Child Care Center	20 SF	2	10 SF			1.5	15 SF	6 FT	Backlight, None In Residential Districts	5 FT	Freestanding	8 FT		
									Building Mounted	Roofline				
(w) Hotel, Motel and Conference Center - (freestanding) Entrance Signs		1/vehicular entrance	20 SF	1.5	30 SF	1.5	45 SF	8 FT	Backlight or White Light	10 FT	Freestanding	15 FT	Sign must be located at top floor of building, otherwise max. area of sign is 20 SF.	
(x) Hotel, Motel and Conference Center (1-3 stories)	90 SF	1/facade, no more than 3 signs	40 SF						Backlight		Building Mounted	Roofline	Sign must be located at top floor of building, otherwise max. area of sign is 20 SF.	
(y) Hotel, Motel and Conference Center (4-5 stories)	90 SF	1/facade, no more than 3 signs	50 SF						Backlight		Building Mounted	Roofline	Sign must be located at top floor of building, otherwise max. area of sign is 20 SF.	
(z) Hotel, Motel and Conference Center (6+ stories)	90 SF	1/facade, no more than 3 signs	60 SF						Backlight		Building Mounted	Roofline	Sign must be located at top floor of building, otherwise max. area of sign is 20 SF.	
(aa) Movie Theaters - Theater Name Entrance Sign	20 SF	2	20 SF	1.5	30 SF	1.5	45 SF	8 FT	Backlight or White Light	10 FT	Freestanding	15 FT		
											Building Mounted	Roofline		
Theater Name Building Sign		1	60 SF											
Movie Title Building Sign		1 per screen	20 SF											
(bb) Restaurant - (Freestanding Building with up to 4000 SF floor area)	60 SF	3	20 SF	1.5	30 SF	1.5	45 SF	8 FT	Backlight	10 FT	Freestanding Building Mounted	15 FT Roofline	Drive-through menu does not count toward sign area.	

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## SECTION 5-1204(D) - SIGN REQUIREMENTS MATRIX

SECTION 5-1204(D) - SIGN REQUIREMENTS TO WATER

LAND USE/ SIGN CATEGORY (or similar) (See Note 6)	Ground Mounted Sign			Ground Mounted Background Structure				Illumination Permitted	Min. Setback From R.O.W. (See Note 2)	Type Permitted	Max. Height (See Note 3)	Additional Requirements	
	Total Aggregate Sign Area	Max. Number of Signs	Max. Area of Any One Sign	Bonus Multiplier	Max. Area of Any One Sign	Bonus Multiplier (See Note 1)	Max. Area of Background Structure						Max. Height of Background Structure
(3) COMMERCIAL/OFFICE SIGNS (Continued)													
(cc) Restaurant - (Freestanding Building with over 4000 SF floor area)	120 SF	3	20 SF freestanding	1.5	30 SF	1.5	45 SF	8 FT	Backlight	10 FT	Freestanding	15 FT	Drive-through menu does not count toward sign area.
			60 SF bldg mounted								Building Mounted		
(dd) Restaurant - (In Line Structure)	2 SF/linear foot of building frontage	1/facade, no more than 3 signs	60 SF						Backlight		Building Mounted	Roofline	Drive-through menu does not count toward sign area.
(ee) Restaurant Drive-Through Menu	30 SF	2	20 SF	1.5	30 SF						Freestanding Building Mounted	5 FT	Must be screened from all roads.
(ff) Business in A-3, A-10, AR, RR, JLMA, TR and CR Districts	10 SF	2/lot	10 SF						None	5 FT	Freestanding Building Mounted	8 FT	
(gg) Business in R-C District	40 SF	2	20 SF						None	5 FT	Freestanding Building Mounted	8 FT	
(hh) Business in R Districts	4 SF for lots ≤ 10 acres; 8 SF for lots > 10 acres	1 for lots ≤ 10 acres; 2 for lots > 10 acres	4 SF						None	5 FT	Freestanding Building Mounted	8 FT	

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## SECTION 5-1204(D) - SIGN REQUIREMENTS MATRIX

SECTION 5-1204(D) - SIGN REQUIREMENTS WITH MIX

LAND USE/ SIGN CATEGORY (or similar) (See Note 6)	Ground Mounted		Ground Mounted			Ground Mounted			Illumination Permitted	Min. Setback From R.O.W. (See Note 2)	Type Permitted	Max. Height (See Note 3)	Additional Requirements	
	Total Aggregate Sign Area	Max. Number of Signs	Max. Area of Any One Sign	Sign		Background Structure								
				Bonus Multiplier	Max. Area of Any One Sign	Bonus Multiplier (See Note 1)	Max. Area of Background Structure	Max. Height of Background Structure						
<b>(3) COMMERCIAL/OFFICE SIGNS (Continued)</b>														
(ii) Business Signs (Signs of a character which have not been listed or described heretofore provided they advertise only goods or services offered on the premises.	60 SF	3 (freestanding building)	20 SF	1.5	30 SF	1.5	45 SF	8 FT	Backlight or White Light	10 FT	Freestanding	15 FT		
		1 freestanding sign/vehicular entrance, no more than 3 for center and 1 building mounted sign/facade no more than 3 for business (in-line structure)									Building Mounted	Roofline		
<b>(4) INDUSTRIAL SIGNS</b>														
(a) PD-IP and PD-GI Development Entrance Signs		2/vehicular entrance	60 SF			2	120 SF	5FT	Backlight or White Light	10 FT	Ground Mounted	5 FT	One side only; signs shall contain no advertising.	
(b) Flex Industrial/ Light Industrial/Warehouse - Entrance Signs		1/vehicular entrance	20 SF			1.5	30 SF	8 FT	Backlight or White Light	10 FT	Freestanding	15 FT		
(c) Flex Industrial/ Light Industrial/Warehouse - Tenant Signs	20 SF	1/tenant	20 SF						Backlight		Building Mounted	Roofline		

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SECTION 5-1204(D) - SIGN REQUIREMENTS MATRIX

SECTION 5-1204(D) - SIGN REQUIREMENTS TO BE COMPLETED

LAND USE/ SIGN CATEGORY (or similar) (See Note 6)	Ground Mounted			Ground Mounted Sign			Ground Mounted Background Structure			Additional Requirements				
	Total Aggregate Sign Area	Max. Number of Signs	Max. Area of Any One Sign	Bonus Multiplier	Max. Area of Any One Sign	Bonus Multiplier (See Note 1)	Max. Area of Background Structure	Max. Height of Background Structure	Illumination Permitted	Min. Setback From R.O.W. (See Note 2)	Type Permitted	Max. Height (See Note 3)	Additional Requirements	
(5) TEMPORARY SIGNS (For Temporary Real Estate Signs, See Number 6 Below)														
(a) Temporary Signs - On-	4 SF	1	4 SF						None	5 FT	Freestanding Balloons Banners Pennants Inflated Devices	4 FT	Permit limited to one (1) month from date of issuance, for no more than 3 consecutive months.	
									None	5 FT	Freestanding Balloons Banners Pennants Inflated Devices	4 FT	Permit limited to one (1) month from date of issuance, for no more than 3 consecutive months.	
(b) Temporary Signs - Off-		Reasonable number as determined by the Zoning Administrator.	4 SF						None	5 FT	Freestanding Balloons Banners Pennants Inflated Devices	4 FT	Permit limited to one (1) month from date of issuance, for no more than 3 consecutive months.	
(c) Temporary Construction Signs	20 SF Commercial	1/contractor per job site	20 SF						None	10 FT	Ground Mounted	8 FT	Residential signs only in A-3, A-10, A-25, AR, RR & CR Districts. Contractor to remove sign upon completion of construction.	
	10 SF Residential	1/contractor per job site	10 SF											

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SECTION 5-1204(D) - SIGN REQUIREMENTS MATRIX

SECTION 3-1204(D) - SIGN REQUIREMENTS AND STANDARDS

LAND USE/ SIGN CATEGORY (or similar) (See Note 6)	Ground Mounted Sign			Ground Mounted Background Structure				Illumination Permitted	Min. Setback From R.O.W. (See Note 2)	Type Permitted	Max. Height (See Note 3)	Additional Requirements	
	Total Aggregate Sign Area	Max. Number of Signs	Max. Area of Any One Sign	Bonus Multiplier	Max. Area of Any One Sign	Bonus Multiplier (See Note 1)	Max. Area of Background Structure						Max. Height of Background Structure
(G) REAL ESTATE SIGNS													
(a) Real Estate - Residential For Sale Sign	6 SF	1	6 SF						5 FT	Freestanding	6 FT		
	up to 10 acres 12 SF more than 10 acres	2	6 SF										
(b) Real Estate - Residential Subdivision		1/vehicular entrance to subdivision from state right-of-way	20 SF						5 FT	Freestanding	6 FT	Area of all real estate signs within the subdivision which front on a public highway shall be no more than four (4) square feet per lot fronting on the highway.	
(c) Real Estate - Commercial For Sale Sign		1 (upon any lot of less than 10 acres); 2 upon any lot in excess of ten (10) acres.	20 SF						5 FT	Freestanding	6 FT		
(d) Real Estate - Temporary Open House - Off-Site		4 /property	4 SF						5 FT	Freestanding	4 FT	Conditions apply (see note 4).	
(e) Non-PD District Project Directional Signs - Off-Site		10/total combined for all builders per project	2 SF						5 FT	Freestanding	4 FT	Conditions apply. (see note 5).	

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SECTION 5-1204(D) - SIGN REQUIREMENTS MATRIX

LAND USE/ SIGN CATEGORY (or similar) (See Note 6)	Ground Mounted Sign			Ground Mounted Background Structure			Additional Requirements						
	Total Aggregate Sign Area	Max. Number of Signs	Max. Area of Any One Sign	Bonus Multiplier	Max. Area of Any One Sign	Bonus Multiplier (See Note 1)	Max. Area of Background Structure	Max. Height of Background Structure	Illumination Permitted	Min. Setback From R.O.W. (See Note 2)	Type Permitted (See Note 3)	Max. Height (See Note 3)	Additional Requirements
(7) MISCELLANEOUS SIGNS													
(a) Government Signs/ Official Notices													Not regulated.
(b) Historical Markers (c) Danger, Advisory, Railroad Bridge, Ferry Transportation, Red Cross, and Other Similar Signs													Not regulated.
(d) Hunting, Fishing or Trespassing Signs			2 SF						None	None	Freestanding Building Mounted As Permitted in Section 5-1202(A)(3)	5 FT	
(e) Informational Signs		1/use identifying locations such as restrooms, loading areas, etc.	2 SF						Backlight or White Light	5 FT	Freestanding Building Mounted	5 FT	Signs shall contain no advertising.
(f) PD-SA, PD-TC, PD-TT, PD-UC, PD-TRC, PD-TREC, PD-RV, and PD-CV Development Entrance Signs		2/vehicular entrance	60 SF			2	120 SF	5 FT	Backlight or White Light	10 FT	Ground Mounted	5 FT	One-side only; signs shall contain no advertising.
(g) Private Recreation Parks	10 SF	2	6 SF						None	5 FT	Freestanding	6 FT	

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SECTION 5-1204(D) - SIGN REQUIREMENTS MATRIX

GENERAL NOTES

1. Whenever a bonus multiplier is used for ground mounted signs, a landscaped base with a minimum depth of 36 inches on a side, must be maintained.
2. All signs must be set back the minimum distance from the road right-of-way, as specified, unless a greater setback is required by the Code of Virginia.
3. The maximum height column does not apply when ground mounted bonus' are obtained. Use the maximum height column for Ground Mounted Background Structure.
4. The following conditions shall apply for permitted 'Real Estate-Temporary Open House - Off Site' signs.
  - a. Signs shall be located only at controlled intersections where there is a change in direction.
  - b. Signs shall be placed on private property only.
  - c. Signs shall be in place only during hours the house is open plus one hour before and two hours after the event.
  - d. Signs may be used for two (2) days on the weekends and three (3) days in the case of a holiday falling on a Monday, as well as one-half (1/2) day during the week.
  - e. The owner for the house or his/her designated agent must be present for the duration of the open house hours.
  - f. Signs shall include a company name with direction arrow.
  - g. Signs shall consist of a metal frame with composition sign of a semi-permanent type.
  - h. Homeowners or their designated agent may not use "Non-PD District Project Directional Signs - Off-Site".
5. The following conditions shall apply for permitted Non-PD District Project Directional Signs - Off-Site.
  - a. The location of signs must be approved by the County at the time of the sign permit application.
  - b. Signs shall be located only at controlled intersections where there is a change in direction.
  - c. Signs shall be placed on private property only.
  - d. Signs shall not be permitted on any arterial road, nor on any road listed in Section 5-900 of this Ordinance.
  - e. The signs may be installed after sundown Friday night and must be removed by sundown on Sunday. If Monday is a legal holiday, the signs may remain until sundown Monday.
  - f. The signs must be made of a permanent material, signs made of paper or cardboard are hereby specifically prohibited.
  - g. Builders may not use "Non-PD District Directional Signs - Off-Site in combination with "Real Estate-Temporary Open House - Off-Site" signs.
6. In selecting the most appropriate land use/sign category, the more specific listing would take precedence.

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**Division D: Landscaping, Buffering and Tree Preservation**

**Section 5-1300**

**Tree Planting and Replacement.**

**5-1301**

**Purpose.** The purpose and intent of this Section is to promulgate regulations for the planting and replacement of trees destroyed or damaged during the development or redevelopment process, pursuant to Section 15.2-961 of the Code of Virginia.

**5-1302**

**General Standards.**

- (A) All trees to be planted shall meet the specifications of the American Association of Nurserymen.
- (B) The planting of trees shall be done in accordance with either the standardized landscape specifications jointly adopted by the Virginia Nurserymen's Association, the Virginia Society of Landscape Designers and the Virginia Chapter of the American Society of Landscape Architects, or the road and bridge specifications of the Virginia Department of Transportation. The County shall maintain current copies of these specifications available to the public.
- (C) The minimum caliper of all deciduous trees planted shall be one (1) inch, and the minimum height of all evergreen trees shall be six (6) feet.

**5-1303**

**Canopy Requirements.**

- (A) **Site Planning.** A Final Site Plan, or Construction Plans and Profiles for single family attached units in those districts where applicable, required under Section 6-701, shall include the planting and replacement of trees on site to the extent that, at maturity of ten (10) years, minimum tree canopy shall be provided as follows:
  - (1) Ten (10) percent tree canopy for sites zoned business, commercial, or industrial in the GB, PD-IP, PD-OP, PD-GI, MR-HI, PD-CC, PD-RDP, PD-SA, PD-TRC, PD-TREC, PD-TC, CLI, RC, and PD-H Districts.

(2) Ten (10) percent tree canopy for sites zoned PD-H and R-24 with densities of twenty (20) or more units per acre.

(3) Fifteen (15) percent tree canopy for sites zoned PD-H and R-16 for multi-family and single family attached units with densities of eleven (11) to nineteen (19) units per acre.

(4) Twenty (20) percent tree canopy for sites zoned PD-H and R-8 for multi-family and single family attached units with densities of three (3) to ten (10) units per acre.

(B) **For development requiring a plan of subdivision, but not a site plan, property not zoned A-3, A-10, AR-1, AR-2, RR-1, RR-2, i.e. single family and duplex dwellings.** When a plan of subdivision is required under the Land Subdivision and Development Ordinance and the property is not zoned A-3, A-10, AR-1, AR-2, RR-1, RR-2, a landscape plan shall be included at Record Plat or construction drawings, whichever shall occur first, that provides for the planting or replacement of trees on the site to the extent that, at maturity of ten (10) years, minimum tree canopies will be provided as follows:

(1) If the site has a tree canopy coverage of 20% or more, the plan shall provide for the preservation, or planting and replacement of trees on site so as to result in a tree canopy of at least 20%, calculated at 10 years maturity.

(2) If the site has a tree canopy coverage of less than twenty (20%) prior to recordation of the subdivision, the plan shall provide for the preservation or planting and replacement of an equivalent percentage of tree canopy coverage as existed prior to development, calculated at 10 year maturity.

(3) Every platted lot shall have a minimum tree canopy coverage of 2.5%, or 3,000 square feet, whichever is less, calculated at 10 years maturity, exempting lots for which no permits for new structures will be sought and the designated parent tract. Such trees shall be counted toward the

minimum tree canopy requirements in (1) and (2) above.

- (4) Trees shall be planted at a density of one tree per 50 linear feet along all areas dedicated for use for vehicular access. Such trees shall have a minimum caliper of 1" and a height at maturity of 15 feet or more. Such trees shall be counted toward the minimum tree canopy requirements in (1), (2) and (3) above.

(C) **Exclusions.** For the purpose of calculating the area of a site, to determine tree canopy coverage requirements, the following areas shall be excluded:

- (1) Properties reserved or dedicated for future street construction or other public improvements.
- (2) Ponds and unwooded wetlands.
- (3) Properties reserved or dedicated for school sites, playing fields and other non-wooded recreation areas, and other facilities and areas of a similar nature.
- [(4) Portions of a site which contain existing structures that are not the subject of a pending application.

(D) **Existing Conditions.** Existing trees which are to be preserved may be included to meet all or part of the canopy requirements, and may include wooded preserves, if the site plan or record plat, or construction plans and profiles, identifies such trees and the trees meet standards of desirability and life-year expectancy established by the Zoning Administrator.

**5-1304**

**Variations.** Reasonable exceptions to or deviations from the requirements in this Section to allow for the reasonable development of farmland or other areas devoid of woody materials, including the preservation of wetlands, or when the strict application of the requirements would result in unnecessary or otherwise unreasonable hardship to the developer, shall be considered by the Zoning Administrator upon application by the owner.

**5-1305**

**Enforcement.** Penalties for violations of the requirements of this Section shall be the same as those applicable to violations of other provisions of this Ordinance.

**Section 5-1400**

**Buffering and Screening.**

**5-1401**

**Purpose.** The purpose and intent of this Section is to facilitate the creation of a convenient, attractive and harmonious county; to conserve natural resources including adequate air and water; to preserve the character of an area by preventing or mitigating the harmful effects of one use on another use; and to preserve and promote the health, safety and general welfare to the public. More specifically, this Section is intended to mitigate the effects of uses on adjacent uses by requiring a screen and/or buffer between the uses in order to minimize the harmful impacts of noise, dust and other debris, motor vehicle headlight glare or other artificial light intrusion, and other objectionable activities or impacts conducted on or created by an adjoining or nearby use. Also, this Section is intended to require the landscaping of parking lots in order to reduce the harmful effects of heat and noise and the glare of motor vehicle lights; to preserve underground water reservoirs and to permit the return of precipitation to the ground water strata; to enhance the natural drainage system and ameliorate storm water drainage problems; to reduce the level of carbon dioxide and return pure oxygen to the atmosphere; to prevent soil erosion; and to provide shade.

**5-1402**

**Applicability.**

- (A) The provisions of this Section shall apply to all development where site plans and/or subdivisions are filed in accordance with the provisions of Section 6-700 of this Ordinance or the Land Subdivision and Development Ordinance.
- (B) The provisions of this Section are intended to complement the regulations of Section 5-1300 of this Ordinance. Trees planted to fulfill the Canopy requirements of Section 5-1300 may also fulfill the Buffering and Screening requirements of this Section. However, where any provision of this Section imposes restrictions or standards different from those of Section 5-1300 or any other County ordinance or regulation or other provision of law, whichever provisions are more restrictive or impose higher standards shall control, unless the intent is clearly otherwise.

**5-1403**

**Standards.** The following standards shall apply to the installation and maintenance of all landscaping and screening required by the provisions of this Section.

- (A) The planting and maintenance of all trees and shrubs shall be in accordance with the provisions of Facilities Standards Manual, and the following requirements:

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(1) The installation of all landscaping shall be done following the procedures established by the American Association of Nurserymen.

(2) At the time of planting, all canopy trees shall have a minimum caliper of one (1) inch dba, and all understory trees shall have a minimum height of six (6) feet. Evergreen trees shall be a minimum of six (6) feet in height. Evergreen shrubs shall have a minimum height of thirty (30) inches. Dwarf deciduous shrubs shall have a minimum height of eighteen (18) inches.

(B) Existing vegetation which is suitable for use in compliance with the requirements of this Section, when supplemented by new vegetation, if needed, so as to provide buffering and screening in accordance with the purpose and intent of this Section, may and should be used as required planting.

(C) In addition to the standards set forth in this Section, the Board of Supervisors or the Board of Zoning Appeals may require more stringent requirements as part of an approval action of a special exception, variance, or as part of proffered conditions.

(D) All landscaping shall permit site distances consistent with all current code requirements of Loudoun County and VDOT.

#### **5-1404**

#### **Landscaping Plan.**

(A) Except as permitted by the provisions of Section 5-1305 below, a landscaping plan, including a parking lot landscape and screening plan, shall be submitted as part of every final site plan required by the provisions of Section 6-701.

(B) Such landscaping plans shall be drawn to scale, including dimensions and distances, and shall delineate existing and proposed buildings, parking spaces or other vehicle areas, access aisles, driveways, and the location, size, and description of all landscaping materials and the installation schedule if materials are to be installed in phases extending beyond 90 days from the date of occupancy of the building or structure to which they are appurtenant.

(C) The landscaping measures, as required by this Section shall be shown on such initial plan and shall be completed or bonded in accord with current County policy according to specifications prior to approval of any Certificate of Occupancy.

5-1405

**Buffer Yards and Screening, General Provisions.**

- (A) Buffer yards and screening shall be provided in accordance with the Buffer Yard and Screening Matrix set forth in Section 5-1414(A), and in accordance with the provisions of this Section and Section 5-1407 and 5-1408 below.
- (B) Buffer yards and screening shall be provided within the zoning district and on the lot whose use is indicated in the left column of the matrix where it is contiguous or across the street from land used or zoned for uses indicated across the top of the matrix.
- (C) Where the structure or lot or development is to contain more than one use or category of uses as presented in the matrix, the more stringent requirements of the matrix shall apply; provided, however, that the Zoning Administrator may reduce and/or modify the requirements of the matrix upon a finding that the need for the more stringent requirements has been partially mitigated or eliminated by the arrangement of uses.
- (D) The uses in the matrix are listed in abbreviated form. Other similar uses, as may be included in a listing presented in the district regulations, shall be subject to the same regulations as are presented for a use listed on the matrix.
- (E) In those instances where a proposed use and/or an existing use on the abutting property is not listed in the matrix, the Zoning Administrator, using the matrix as a guide, shall determine to what extent buffering and screening shall be provided.
- (F) In addition to the standards set forth in herein for a particular use, all uses allowed by special exception, or variance in a given district, shall be required to provide buffer yards as determined by the BZA or Board of Supervisors, as the case may be, using the matrix as a guide.

5-1406

**Determination of Buffer Yard Requirements.** To determine the type of buffer yard required between two (2) adjacent parcels or between a parcel and a use across the street, refer to the buffer yard and screening matrix, and identify the buffer yard required pursuant to one of the following procedures:

- (A) **Proposed development adjacent to an improved property that is a pre-existing use which existed prior to the effective date of this Ordinance.**

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- 1 (1) If the proposed use is in the same land use category or is a  
2 more intensive than the pre-existing use, the proposed use must  
3 provide the buffer yard type as required by the Buffer Yard and  
4 Screening Matrix.  
5  
6 (2) If the proposed use is less intensive than the pre-existing use,  
7 the proposed use must provide the buffer yard type that would  
8 have been provided by the existing more intensive use as if it  
9 were subject to the requirements herein.  
10  
11 (3) The Zoning Administrator may waive reduce and/or modify  
12 the requirement if it presents a substantial hardship or is  
13 considered unnecessary as identified in Section 5-1409.

14 (B) **Proposed development adjacent to a use developed subsequent to**  
15 **the effective date of this Ordinance.** The proposed use must install  
16 plant units in order to bring the total buffer yard required between the  
17 two uses into conformance with the Buffer Yard and Screening Matrix.  
18

19 (C) **Proposed Development Adjacent to a Vacant Property.** To  
20 determine the buffer yard type for a proposed development which will  
21 be constructed adjacent to vacant land, the Zoning Administrator must  
22 first make a determination on the probable future use of the adjacent  
23 vacant land, using the Comprehensive Plan, Zoning Ordinance and  
24 Zoning District Map.  
25

- 26 (1) If the proposed use is more intensive than the probable future  
27 use of adjacent vacant land, as determined by the Zoning  
28 Administrator, then the proposed use must provide a buffer as  
29 required by the Buffer Yard and Screening Matrix.  
30  
31 (2) If the subsequent use of the adjacent vacant land is more  
32 intensive than the probable use determined by the Zoning  
33 Administrator, and the subsequent use is required to provide a  
34 buffer prescribed in the Buffer Yard and Screening Matrix, the  
35 buffer yard installed by the first use may be taken into  
36 consideration by the Zoning Administrator in considering a  
37 reduction of required buffer.  
38  
39 (3) If the subsequent use of the adjacent vacant land is less  
40 intensive than the probable use determined by the Zoning  
41 Administrator, the subsequent use must install the difference  
42 between the plant units installed by the pre-existing adjacent  
43 use and the number of plant units required by the Buffer  
44 Yard and Screening Matrix.  
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- (4) If the proposed use is less intensive than the probable future use of the vacant land, as determined by the Zoning Administrator, no buffer yard shall be required of the proposed use.

(D) **Contractual Reduction of Buffer Yard Abutting Vacant Land.**  
When a land use is proposed adjacent to vacant land, the owners of both parcels may enter into a contractual relationship to provide for a buffer yard equivalent to the buffer yard which shall ultimately be required. Such a contract shall include:

- (1) A statement by the owner of the vacant land of an intent to develop at no greater than a specified land use category consistent with reduced buffer yards.
- (2) An agreement that the owner of the vacant land assumes all responsibility for additional buffer yards required by the development of his parcel with a more intense use than had been agreed upon.
- (3) The contract shall be in the form of a covenant or deed restriction, recorded in the Office of the Clerk of the Circuit Court of Loudoun County, Virginia, which shall run with the land.

(E) **Special Situations.**

- (1) When the adjacent land is used for a wayside stand or other temporary use, the buffer yard type shall be determined as if the adjacent property were vacant as provided in Section 5-1406(C).
- (2) If any property adjoins any existing or planned arterial road, except in the A-3, A-10, AR-1, ~~or AR-2~~, RR-1, or RR-2 district, the required buffer yard shall be in accordance with Buffer Yard Type 3, however, such buffer yard landscaping shall be supplemented by a landscaped earthen berm at least four (4) feet in height and not to exceed a slope of 2:1. This requirement may be waived modified, and/or reduced, or the location of the required berm may be adjusted by the Zoning Administrator, where necessary to preserve existing mature trees. No buffer yard shall be required for the A-3 and A-10 districts where such property adjoins any existing or planned arterial road.

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5 (3) If any adjoining property is located within a zoned  
6 municipality, the Zoning Administrator shall investigate the  
7 applicable municipal zoning district regulations and shall  
8 determine which district established by this Ordinance is most  
9 equivalent. Requirements for buffer yards shall then be the  
10 same as if the adjoining property were zoned in the equivalent  
11 County zoning district.

12  
13 **5-1407**

**Buffer Yard and Screening Requirements.**

- 14  
15 (A) **Location.** Buffer yards shall be located along the perimeter of a lot or  
16 parcel. Where a parcel extends into the center line of an existing road,  
17 the buffer yard shall begin at and extend inward from the ultimate right-  
18 of-way line of said road. Buffer yards shall extend to the lot line, parcel  
19 boundary or rights-of-way line, except where easements, covenants or  
20 natural features may require the buffer yard to be set back from the  
21 property line, in which event the buffer yard shall be in addition to such  
22 easements, covenants or natural features. Buffer yards shall be provided  
23 within the required minimum yard setback areas. If the minimum buffer  
24 width is larger than the yard setback, the minimum buffer width must be  
25 provided.

- 26  
27 (1) In the case of driveways, parking areas, and accessory  
28 structures permitted within required yard setbacks, at least fifty  
29 (50) percent of the area of the required minimum yard setback  
30 area shall consist of permeable materials.  
31  
32 (2) If parking and/or loading is permitted within the required  
33 minimum yard setback area, then Section 5-1413 "Parking Lot  
34 Landscaping and Screening Requirements" shall prevail.

35  
36 (B) **Screening Requirements in Buffer Yards.**

- 37  
38 (1) Buffer yard requirements are stated in Section 5-1414(B).  
39  
40 (2) Those plant materials identified in Section 5-1414(C) or their  
41 equivalents shall satisfy the requirements of this Section.  
42  
43 (3) Whenever a wall, fence, and/or berm is required within a buffer  
44 yard, they shall be provided in addition to the plant units  
45 required.

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1       **5-1408**

2       **Use of Buffer Yards.** A buffer yard may be used for passive recreation and it  
3       may contain pedestrian, bicycle or equestrian trails, provided that: a) minimal  
4       plant materials are eliminated, b) the total width of the buffer is maintained, and  
5       c) all other regulations of this Ordinance are met. Utility easements may be  
6       included within buffer yards provided that the utility requirements and buffer yard  
7       requirements are compatible and canopy trees are not planted within said  
8       easement. Vehicular entrances may cross a buffer yard. Signs, pursuant to  
9       Section 5-1200, may be located in the buffer yards.

10       **5-1409**

11       **Buffer Yard Waivers and Modifications.** Buffer yard requirements may be  
12       waived or modified by the Zoning Administrator in any of the following  
13       circumstances. The Zoning Administrator may attach conditions to any waiver or  
14       modification in order to assure that the results of the waiver or modification will  
15       be in accordance with the purpose and intent of this Section.

- 16       (A)       Where the strict provisions of this Section would reduce the usable area  
17       of a lot configuration or size to a point which would preclude a  
18       reasonable use of the lot, buffer yards may be waived, reduced and/ or  
19       modified by the Zoning Administrator, upon showing that the building  
20       and/or the yard has been designed to minimize adverse impact through a  
21       combination of architectural, landscape and/or other design techniques.
- 22       (B)       The Zoning Administrator may waive, reduce and/or modify buffer yard  
23       requirements if in his opinion the topography of the lot providing the  
24       buffer yard and the lot being protected is such that the required buffer  
25       yard would not be effective.
- 26       (C)       The Zoning Administrator may waive, reduce and/or modify buffer yard  
27       requirements for single family attached dwelling units where a six (6)  
28       foot permanent fence has been provided to enclose a privacy yard (for  
29       rear yards and side yards) and such fence is architecturally designed and  
30       coordinated with landscape techniques to minimize adverse impact to  
31       adjacent properties.
- 32       (D)       The Zoning Administrator may waive, reduce or modify buffer yard  
33       requirements for any public use when such use has been specifically  
34       designed to minimize adverse impact on adjacent properties.
- 35       (E)       Buffer Yard Exceptions. When a land use is proposed adjacent to a  
36       lake, wetland, or other natural area, which is to remain undeveloped,  
37       and which is at least three hundred (300) feet in width, the Zoning  
38         
39         
40         
41

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1 Administrator may waive, reduce, and/or modify the buffer  
2 requirements provided the intent of these regulations are preserved.

3  
4 (F) The Zoning Administrator may waive, reduce and/or modify buffer yard  
5 requirements for side and rear yards where lots zoned MR-HI, GB, PD-  
6 IP, PD-GI, MR-HI or CLI abut, upon finding that such waiver, reduction  
7 and/or modification is designed to complement proposed development  
8 of existing or proposed uses. In any case, a screen wall of a minimum  
9 six (6) foot in height or buffer yard shall be constructed where such side  
10 or rear yard is visible from the public right-of-way.

11  
12 (G) The Zoning Administrator may waive, reduce and/or modify buffer  
13 requirements for a telecommunications monopole which is co-located  
14 on a facility which is owned or controlled by a public use or fire and/or  
15 rescue company, or in areas planned or zoned for employment and  
16 industrial uses where such use is permitted by right, provided the site is  
17 architecturally designed and coordinated with landscape techniques to  
18 minimize adverse impacts to adjacent properties.

19  
20 (H) The Zoning Administrator, upon recommendation by the Loudoun  
21 County Sheriff's office, may waive, reduce or modify the screening  
22 requirements for any school use, upon finding that the screening  
23 requirements obstruct visibility and create a security concern.

24  
25 (I) In the A-3, A-10, AR-1, AR-2, RR-1 and RR-2 zoning districts, the  
26 Zoning Administrator may permit the required buffer to surround the  
27 proposed use, rather than to be located on the property line as required  
28 by Section 5-1407(A).

29  
30 **5-1410**

**Maintenance.**

31  
32 (A) The owner, or his agent, shall be responsible for the maintenance, repair  
33 and replacement of all required landscape materials and screening and  
34 buffering as may be required by the provisions of this Section.

35  
36 (B) All plant material shall be tended and maintained in a healthy growing  
37 condition, replaced when necessary and kept free of refuse and debris.

38  
39 (C) Fences and walls shall be maintained in good repair. Openings within  
40 the barriers may be required by the Zoning Administrator for  
41 accessibility to an area for necessary maintenance.

42  
43 **5-1411**

**Bond/Cash Deposit Requirements.** In lieu of installation of the landscape  
44 materials prior to occupancy, the applicant may post a bond acceptable to the  
45 County, conditioned upon satisfactory installation of the landscaping proposed in  
46 the landscape plan.

A307

1  
2 **5-1412**

**Appeals.** Any person aggrieved by a decision of the Zoning Administrator may appeal such decision in accordance with the provisions of Section 6-1700.

3  
4  
5 **5-1413**

**Parking Lot Landscaping and Screening Requirements.**

6  
7 (A) General. Parking lot landscape and screening plan shall comply with the  
8 general standards in Section 5-1403 and 5-1404.

9  
10 (1) Existing vegetation which is suitable for use in compliance  
11 with the requirements of this Section when supplemented so as  
12 to provide planting and screening in accordance with the  
13 purpose and intent of this Section, may and should be used as  
14 required planting. Additionally, vegetation which fulfills the  
15 requirements set forth herein for exterior parking lot screening  
16 may also be counted toward fulfilling the requirements for  
17 buffer yards set forth in other sections of these regulations.

18  
19 (2) When non-residential parking lots, travelways, alleys, loading  
20 spaces and like uses adjoin land zoned or planned for  
21 residential use, there shall be an opaque barrier constructed to  
22 provide a separation between the two uses. This can be  
23 achieved by a solid type fence no less than six (6) feet in  
24 height, or with densely planted shrubs and berms to provide a  
25 visual barrier. Berms shall not exceed a slope of 2:1.

26  
27 (B) **Interior Parking Lot Landscaping.**

28  
29 (1) Any parking lot, excepting single bay parking lots of twenty  
30 (20) spaces or less, shall be provided with landscaped open  
31 space along the perimeter of the parking area or areas, in the  
32 minimum rate of one (1) canopy tree per ten (10) spaces which  
33 shall be so located that no parking space is more than eighty  
34 (80) feet from a portion of the landscaped open space or  
35 parking island more than eighty (80) feet from a canopy tree.  
36 Landscaped areas between parking areas and buildings shall  
37 not be considered as interior landscaping.

38  
39 (2) The primary landscaping materials used in parking lots shall be  
40 canopy trees. Where possible, grouping of such trees is  
41 encouraged. Shrubs and other live planting materials may be  
42 used to complement the tree landscaping, and shall count  
43 towards the required landscaping.  
44

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- 1 (3) The landscaping areas shall be reasonably dispersed throughout  
2 the parking lot, and shall have a minimum width of six (6) feet  
3 measured from back of curb. There shall be a minimum six (6)  
4 foot wide (back of curb to back of curb) curbed landscape  
5 island at the end of every row of parking - equal in length to  
6 the adjoining parking space.  
7  
8 (4) There shall be a minimum of one (1) canopy tree per required  
9 landscape island. Where more than one island is combined in a  
10 linear configuration, canopy trees shall be provided at a  
11 minimum equal to the number of required landscape islands.  
12  
13 (5) The interior dimensions of any planting area shall be sufficient  
14 to protect all landscaping materials planted therein; in any case  
15 a landscaped island shall be protected with a six (6) inch  
16 minimum curb.  
17  
18 (6) Areas used principally for storage of vehicles do not require  
19 interior islands if such areas are screened from adjacent  
20 properties and public streets in accord with Section 5-1406 and  
21 5-1407.  
22

23 (C) **Peripheral Parking Lot Landscaping.** If any parking lot contains ten  
24 (10) or more spaces peripheral parking lot landscaping shall be required  
25 as follows:  
26

- 27 (1) **When the property line abuts land other than street right-**  
28 **of-way.**  
29  
30 (a) Except where otherwise stated in this Ordinance, a  
31 landscaping strip ten (10) feet in width measured from  
32 the edge of pavement, shall be located between the  
33 parking lot and the abutting property lines, except where  
34 driveways or other openings may necessitate other  
35 treatment.  
36  
37 (b) Parking and vehicular traffic circulation lanes shall be  
38 screened with either berming, landscaping, or a  
39 combination of both to a minimum height of thirty (30)  
40 inches. Berming height of thirty inches shall not exceed  
41 a minimum slope of 2:1.  
42  
43 (c) All service areas shall be screened from view through  
44 the use of evergreen plant materials and screen walls,  
45 compatible with the building design. Service area  
46 screen walls, solid fences or fences shall be softened

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1 with climbing vines, shrubs, or other plant materials.  
2 Plantings shall be a minimum height of six (6) feet and  
3 totally screen at least 75% of any one wall surface  
4 (exclusive of gates).

5  
6 (d) All utility equipment (i.e. meters, pedestals,  
7 transformers, etc.) not within the screened service area  
8 shall have a natural evergreen planting screen provided,  
9 but such plantings shall be planned and installed so as  
10 not to hinder the installation or maintenance of such  
11 utility equipment.

12  
13 (e) Peripheral plantings shall include six (6) shrubs per forty  
14 (40) linear feet of abutting land, and one of, or a  
15 combination of the following, which need not  
16 necessarily be installed on center:

17 (i) One understory tree per fifteen (15) linear feet;

18 (ii) One canopy tree per thirty-five (35) linear feet.

19  
20  
21 (2) **Where the property line abuts the street right-of-way.**

22 (a) Except where otherwise stated in this Ordinance, a  
23 landscaping strip ten (10) feet in width, exclusive of a  
24 required sidewalk or trail, shall be located between the  
25 parking lot and right-of-way line.

26  
27 (b) Parking and vehicular traffic circulation lanes shall be  
28 screened with either berming, landscaping, or a  
29 combination of both to a minimum height of thirty (30)  
30 inches. Berming shall not have a slope steeper than 2:1.

31 (c) All service and loading areas shall be screened from  
32 view through the use of evergreen plant materials and  
33 six (6) foot solid fences or screen walls compatible with  
34 the building design. Service and loading area screen  
35 walls or fences shall be softened with climbing vines,  
36 shrubs, or other plant materials. Plantings shall be a  
37 minimum mature height of six (6) feet at time of  
38 installation and totally screen at least seventy five  
39 percent (75%) of any one wall surface (exclusive of  
40 gates).

41 (d) All utility equipment (i.e. meters, pedestals,  
42 transformers, etc.) not within the screened service area  
43  
44  
45  
46



1 shall have a natural evergreen planting screen  
2 provided, but such planting shall be planned and  
3 installed so as not to hinder the installation or  
4 maintenance of such utility equipment.

5  
6 (e) At least one (1) tree for each twenty-five (25) linear feet  
7 of land abutting any right-of-way shall be planted in the  
8 landscaping strip; however, this requirement shall not be  
9 construed as requiring the planting of trees on twenty-  
10 five (25) foot centers.

11  
12 (f) Where peripheral landscaping required by this Section  
13 conflicts with street planting regulations of the Virginia  
14 Department of Transportation, the more restrictive  
15 standards shall apply.

16  
17 (D) **Requirements for Parking Lots in Residential Districts.** Where  
18 parking lots for more than ten (10) cars are permitted or required in  
19 residential districts, the following provisions shall be complied with:

20  
21 (1) The lot may be used only for parking and not for any type of  
22 commercial loading, sales, dead storage, repair work,  
23 dismantling or servicing.

24  
25 (2) A ten (10) foot wide landscaped open space area adjoining any  
26 street line or any lot zoned or planned for residential uses shall  
27 be provided, guarded with wheel bumpers or curb and gutter  
28 and planted in grass and/or shrubs.  
29

SECTION 5-1414(A) - BUFFER YARD AND SCREENING MATRIX

ADJACENT LAND USE GROUPS

PROPOSED LAND USE GROUPS	1	2	3	4	5	6	7	8	9	10	11	12	13
Group 1	N/A												
Dwelling, Single Family Detached													
Group 2	1	1	1	2	2	3	3	4	4	4	4	2	
Dwelling, Single Family Attached													
Group 3	1	1	1	2	2	3	3	4	4	4	4	2	
Dwelling, Multi-Family Congregate Housing Facility Continuing Care Facility Orphanage or other similar institutions													
Group 4	2	2	2	2	2	3	3	4	4	4	4	2	
Day Care Center Church, Chapel Nursery School Elementary School													

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# SECTION 5-1414(A) - BUFFER YARD AND SCREENING MATRIX

## ADJACENT LAND USE GROUPS

PROPOSED LAND USE GROUPS	1	2	3	4	5	6	7	8	9	10	11	12	13
Group 5	2	2	2	2	2	3	3	4	4	4	4	N/A	
Middle and High School Community & Recreation Center, and Library Auditorium, Performing Arts Center and Assembly Hall, and Theater (indoor) Municipal and Governmental Building and Structure Fire, Police, and Rescue Station Medical Care Facility Hospital													
Group 6	2	2	2	2	N/A	N/A	N/A	N/A	3	4	4	4	N/A
Financial Institution Office Business Service Establishment Retail Sales Establishment Health & Fitness Center Funeral Home, Mortuary, Crematory Personal Service Establishment													
Group 7	3	3	3	3	N/A	N/A	N/A	N/A	3	4	4	4	N/A
Restaurant Hotel and Motel													

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SECTION 5-1414(A) - BUFFER YARD AND SCREENING MATRIX - ATTACHMENT A

ADJACENT LAND USE GROUPS

PROPOSED LAND USE GROUPS

Group 8

Drive-in Bank Facility  
Fast Food Restaurant  
Drive Through Restaurant  
Auto Service Station  
Car Wash  
Mobile Home Sales and Service  
Motor Vehicle Sales and Service  
Parking Lot/Valet Service

Group 9

Utility Transmission Facility  
Public Utility Service Center,  
Storage Yard  
Telecommunication Facility  
Radio & Television Broadcasting Station,  
including Recording Studio  
Municipal or Governmental Storage  
Yards & Related Facility  
Water Treatment and Distribution  
Facility  
Kennel, outdoor

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SECTION 5-1414(A) - BUFFER YARD AND SCREENING MATRIX - ATTACHMENT A

ADJACENT LAND USE GROUPS

PROPOSED LAND USE GROUPS	1	2	3	4	5	6	7	8	9	10	11	12	13
Group 10	4	4	4	4	4	4	4	4	4	4	4	4	4
Bus, Rail, and Truck Terminal													
Long Term Vehicle Storage													
Warehousing & Storage Facility													
Newspaper Offices and Distribution Service													
Lumber & Building Material Yard and Storage Facility													
Wholesale Trade Office and Storage Facility													
Heavy Equipment Sale, Rental, and Service													
Sand, Gravel, Coal & Earth Sales and Storage Facility													
Boat Sales, Storage and Service													
Recycling Center													
Vehicle Wholesale Auction													
Group 11	4	4	4	4	4	4	4	4	4	4	4	4	4

Wholesale Printing  
Laundry, Cleaning, and Dyeing Plant  
Facilities for Manufacturing, Processing,  
Assembly, Packaging, Bottling, and  
Canning

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SECTION 5-1414(A) - BUFFER YARD AND SCREENING MATRIX - ATTACHMENT A

ADJACENT LAND USE GROUPS

PROPOSED LAND USE GROUPS	1	2	3	4	5	6	7	8	9	10	11	12	13
Group 12	4	4	4	4	4	4	4	4	4	4	4	4	4
Asphalt or Concrete Mixing Plant													
General Construction Company, including													
Hauling, Road Paving, Roofing, and Sewer													
Metal Fabrication Shop													
Metal Salvage and Open Storage Yard													
and Operation													
Agriculture Processing Facility													
Outdoor Movie Theater													
Wood Processing Facility or Sawmill													
Forging Plant													
Rifle and Pistol Range, outdoor													
Sewage Treatment Facility													
Sanitary Landfill													
Rendering or Tanning Plants													
Petroleum or Chemical Refining													
or Production													
Ship Yards and Boat Manufacture													
Junk Yard													
Fuel Sales													
Group 13	2	2	2	2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A													
N/A													
Farming, including livestock and													
horticultural activity													
Fur Bearing Animal Raising													
Stable and Equestrian Center													

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SECTION 5-1414 B(1)  
BUFFER YARD TYPE 1

<u>FRONT YARD BUFFER WIDTH</u>	<u>REQUIRED PLANT UNITS</u> <u>PER 100 LINEAL FEET</u>
10' Minimum	2 Canopy Tree(s) 0 Understory Trees 0 Shrubs 0 Evergreen Trees
<u>REAR YARD BUFFER WIDTH</u>	
10' Minimum	1 Canopy Tree(s) 4 Understory Trees 6 Shrubs 0 Evergreen Trees
<u>SIDE YARD BUFFER WIDTH</u>	
5' minimum	0 Canopy Tree(s) 4 Understory Trees 6 Shrubs 0 Evergreen Trees

**SECTION 5-1414 B(2)**  
**BUFFER YARD TYPE 2**

<u>FRONT YARD BUFFER WIDTH</u>	<u>REQUIRED PLANT UNITS</u> <u>PER 100 LINEAL FEET</u>
15' Minimum	3 Canopy Tree(s) 2 Understory Trees 10 Shrubs 0 Evergreen Trees
<u>REAR YARD BUFFER WIDTH</u>	
20' minimum	2 Canopy Tree(s) 6 Understory Trees 10 Shrubs (75% of which must be evergreens) 0 Evergreen Trees
<u>SIDE YARD BUFFER WIDTH</u>	
15' minimum	2 Canopy Tree(s) 3 Understory Trees 8 Shrubs (75% of which must be evergreens) 0 Evergreen Trees



**SECTION 5-1414 B(3)**  
**BUFFER YARD TYPE 3**

<u>FRONT YARD BUFFER WIDTH</u>	<u>REQUIRED PLANT UNITS</u> <u>PER 100 LINEAL FEET</u>
20' Minimum	3 Canopy Tree(s) 3 Understory Trees 24 Shrubs 0 Evergreen Trees
<u>REAR YARD BUFFER WIDTH</u>	
25' minimum	4 Canopy Tree(s) 7 Understory Trees 30 Shrubs (75% of which must be evergreens) 0 Evergreen Trees
<u>SIDE YARD BUFFER WIDTH</u>	
20' minimum	2 Canopy Tree(s) 5 Understory Trees 20 Shrubs 0 Evergreen Trees
<u>STRUCTURE REQUIRED IN REAR YARD</u>	A six foot high stockade fence, providing a minimum opacity of 95%, or a six foot high masonry wall.
<u>BERM REQUIRED ADJACENT TO AN ARTERIAL ROAD</u>	An earthen berm with a minimum height of four feet with a slope not to exceed 3:1 planted with turf or ground cover material.

**SECTION 5-1414 B(4)**  
**BUFFER YARD TYPE 4**

<u>FRONT YARD BUFFER WIDTH</u>	<u>REQUIRED PLANT UNITS</u> <u>PER 100 LINEAL FEET</u>
20' Minimum	4 Canopy Tree(s) 3 Understory Trees 20 Shrubs 0 Evergreen Trees
<u>REAR YARD BUFFER WIDTH</u>	
30' minimum	4 Canopy Tree(s) 7 Understory Trees 15 Shrubs 10 Evergreen Trees
<u>SIDE YARD BUFFER WIDTH</u>	
20' minimum	2 Canopy Tree(s) 3 Understory Trees 25 Shrubs 6 Evergreen Trees
<u>STRUCTURE REQUIRED IN REAR AND SIDE YARD</u>	* A six foot high masonry wall (poured concrete, cement block, brick, etc.) providing a minimum opacity of 95%, or a stockade fence.

- \* **Note structures are required only where a use abuts a use of a lower intensity as defined on the Buffer Yard and Screening Matrix. Structures are not required between uses of equal intensity.**

## SECTION 5-1414(C)(1)

### CANOPY TREE:

A deciduous tree, usually single trunked, with a definitely formed crown of foliage, which attains a mature height of at least 30 feet. Preferred species include, but are not limited to:

#### Common Name

American Sycamore  
Bradford Pear  
Crimson King Maple  
English Oak  
Ginkgo (Male)  
Japanese Pagoda  
Japanese Zelkova  
Japonica Regent  
Littleleaf Linden  
London Plane  
Norway Maple  
Pin Oak  
Red Oak  
Red Maple  
Silver Linden  
Sugar Maple  
Sweet Gum  
Thornless Honey Locust  
Willow Oak  
Yellowwood

#### Botanical Name

Platanus occidentalis  
Pyrus calleryana bradford  
Acer plantanoides Crimsom King  
Quercus robur  
Ginkgo bilboa  
Sophora japonica  
Zelkova serrata  
Sophora japonica regent  
Tilia cordata  
Plantanus acerifolia  
Acer platanoides  
Quercus palustris  
Quercus borealis  
Acer rubrum  
Tilia tomentosa  
Acer saccharum  
Liquidambar styraciflua  
Gleditsia triacanthos inermis  
Quercus phellos  
Cladrastis lutea

## SECTION 5-1414(C)(2)

### EVERGREEN TREES:

A non-deciduous tree used for the purposes of screening, weather barrier, or accent planting. Preferred species include, but are not limited to:

#### Common Name

American Holly  
Austrian Pine  
Dark American Arborvitae  
Eastern Red Cedar  
Norway Spruce  
White Pine

#### Botanical Name

Ilex opaca  
Pinus nigra  
Thuja occidentalis nigra  
Juniperus virginiana  
Picea abies  
Pinus strobus

## **SECTION 5-1414(C)(3)**

### **UNDERSTORY TREE:**

A deciduous or evergreen tree which attains a mature height of no greater than 30 feet. Understory trees often times prefer shade and grow naturally under a canopy of larger trees. Preferred species include, but are not limited to:

#### **Common Name**

American Plum  
Amur Maple  
Dogwood  
Downy Serviceberry  
Flowering Cherry  
Flowering Crabapple  
Golden Raintree  
Golden Chain  
Purple Leaf Plum  
Red Bud  
Shadblow  
Washington Hawthorne

#### **Botanical Name**

Prunus americana  
Acer griseum  
Cornus florida  
Amelanchier arborea  
Prunus (various species)  
Malus (various species)  
Koelreuteria  
Laburnum Vossi  
Prunus cerasifera bliricana  
Cercus canadensis  
Amelanchier canadensis  
Crataegus plaenopyrum

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**SECTION 5-1414(C)(4)**

**SHRUB:**

An evergreen multi-trunked woody plant that usually attains a mature height of no greater than 10 feet. Preferred species include, but are not limited to:

**Common Name**

**Botanical Name**

Azalea  
Cotoneaster  
Chinese Holly  
English Yew  
Euonymus  
Japanese Holly  
Japanese Yew  
Rhododendron  
Viburnum  
Winged Euonymus

various species  
various species  
Llex cornuta  
Taxus baccata  
various species  
Llex crenata  
Taxus cuspidata  
various species  
various species  
various species

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## DIVISION E: Performance Standards

### Section 5-1500

### Performance Standards.

#### 5-1501

**Purpose.** It is the intent of these regulations to prevent land or buildings, including those permitted by right or by special exception from being used or occupied in any manner so as to create any dangerous, injurious, or noxious activity such as fire, explosive, radioactive or other hazardous condition; noise or vibration; smoke, dust, odor or other form of air pollution; electrical or other disturbance; glare or heat; liquid or solid refuse or waste condition, conducive or elements, (all referenced to herein as "dangerous or objectionable elements") in a manner or amount as to adversely affect the surrounding area. It is also the intent of these regulations to prevent the disturbance of land on steep slopes in a manner that creates erosion, slippage, slope failure, or other conditions that adversely impacts the environment.

#### 5-1502

**Zoning Districts Regulated.** All permitted and special exception uses, whether such uses are permitted as a principle use or an accessory use, shall operate in conformance with the performance standards set forth in this Division.

#### 5-1503

#### Applicability.

- (A) **Existing Uses.** All uses shall comply with the performance standards set forth in this Ordinance. However, any use which did not comply with these standards when enacted may be permitted to continue so long as the degree of nonconformity is not increased.

Any use which is a lawful nonconforming use, and which on the effective date of this Ordinance complies with the applicable performance standards of this Division, shall continue to so comply. If, at such time, the operations of such lawful nonconforming use violate the standards specified herein, such operations shall not be varied or changed in such a way as to increase the degree of such violation.

- (B) **Agricultural Uses.** The standards contained in this Division shall not apply to any lawful agricultural operation.

**Light And Glare Standards.**

- (A) **General Requirements.** All sources of glare (direct or reflected artificial light) from any source (other than in connection with operating motor vehicles and/or street lighting) must not cause illumination in excess of 0.25 foot candles above background light levels measured at the boundary of any commercial or industrial use abutting any residential use or at the lot line with any residential district, or, in residential or agricultural districts, at the lot line of any adjacent lot. In addition, in the A-3, A-10, AR-1, AR-2, RR-1, RR-2, and CR districts, lights shall be shielded so that the direct glare of the bulb is not visible beyond the property line of the parcel.
- (B) **Method of Measurement.** Illumination levels shall be measured with a photoelectric photometer having a spectral response similar to that of the human eye, following the standard spectral luminous efficiency curve adopted by the Internal Commission on Illumination.



**Earthborn Vibration Standards.**

- (A) **Required Performance Level.** No use, operation or activity shall cause or create earthborn vibrations in excess of the peak particle velocities prescribed below.
- (B) **Method of Measurement.**
- (1) Measurements shall be made at or beyond the adjacent lot line, the nearest residential district boundary line, or the nearest district boundary line as indicated below. Ground transmitted vibration shall be measured with a seismograph or complement of instruments capable of recording vibration displacement and frequency, particle velocity, or acceleration simultaneously in three (3) mutually perpendicular directions.
  - (2) The maximum particle velocity shall be the maximum vector sum of three (3) mutually perpendicular components recorded simultaneously. Particle velocity may also be expressed as 6.28 times the displacement in inches multiplied by the frequency in cycles per second.
  - (2) For the purpose of this Ordinance, steady state vibrations are vibrations which are continuous or vibrations in discrete impulses more frequent than sixty (60) per minute. Discrete impulses which do not exceed sixty (60) per minute shall be considered impact vibrations.
- (C) **Light Intensity Land Uses.**
- (1) Light intensity land use standards apply to all residential districts, all industrial districts, excepting the PD-GI and the MR-HI district(s).
  - (2) Uses subject to these standards shall not cause steady state vibrations to exceed the maximum permitted particle velocities described below. Where more than one set of vibration levels apply, the most restrictive shall govern. Readings may be made at points of maximum vibration intensity.
  - (3) Maximum Permitted Steady State Vibration Levels:

### Area of Measurement

<u>Type of vibration</u>	<u>At residential district boundaries</u>	<u>At other lot lines within district</u>
Continuous	.003	.015
Impulsive (100 per minute or fewer)	.006	.030
Fewer than 8 pulses per 24 hours	.015	.075

- (4) Between the hours of 8 p.m. and 7 a.m., all of the permissible vibration levels indicated above at residential district boundaries shall be reduced to one-half (+) the indicated values.

#### (D) Heavy Intensity Land Uses.

- (1) Heavy intensity land use standards apply to the MR-HI and PD-GI district(s).
- (2) Uses subject to these standards shall not cause steady state vibrations to exceed the maximum permitted particle velocities described in the table below. Where more than one set of vibration levels apply, the most restrictive shall govern. Readings shall be made at points of maximum vibration intensity.
- (3) **Maximum Permitted Steady State Vibration Levels.**

### Area of Measurement

<u>Type of vibration</u>	<u>At residential district boundaries</u>	<u>At other lot lines within district</u>
Continuous	.003	.030
Impulsive (100 per minute or fewer)	.006	.060
Fewer than 8 pulses per 24 hours	.015	.150

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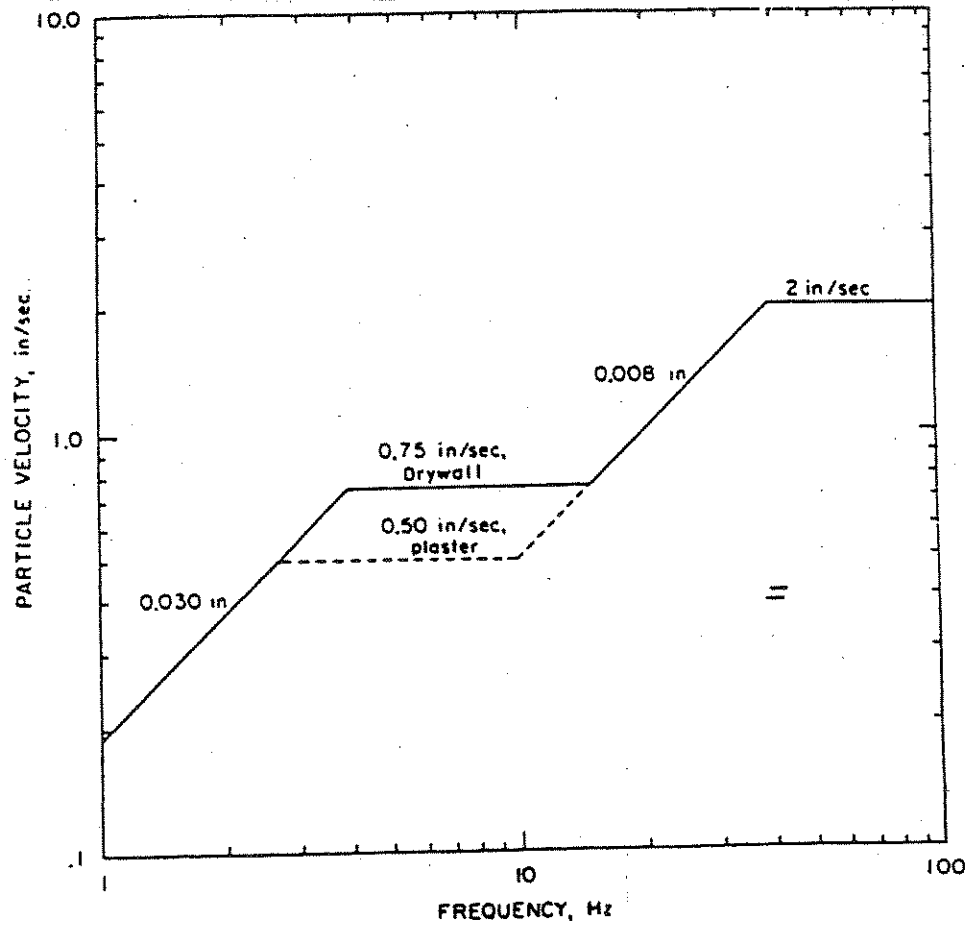
- (4) Between the hours of 8 p.m. and 7 a.m., all of the permissible vibration levels indicated above at residential district boundaries shall be reduced to one-half (+) the indicated values.

**5-1506**

**Stone Quarrying, Extraction and Mining Standards.** In addition to the performance standards set forth in this Division, all stone quarrying extraction and mining uses, whether in the Mineral Resource/Heavy Industrial District (MR-HI) or otherwise, shall satisfy the following additional performance standards:

- (A) No permit for an extraction and mining use shall be issued for any tract of land containing less than fifty (50) acres. This requirement, however, shall not preclude the approval of a permit to enlarge or extend an existing extraction and mining use onto contiguous parcels.
- (B) All blasting shall be limited to the hours of 7 a.m. to 6 p.m. or such lesser time as may be established by special exception.
- (C) All vehicles used to transport excavated material shall be required to be loaded in such manner that the material may not unintentionally be discharged from the vehicle. Trucks shall be cleaned of all material not in the load-bed prior to entering the public streets.
- (D) **Landscaping and Screening Requirements.**
- (1) All areas within 100 feet of an adjacent public road or a zoning district on land bay allowing or planned to allow residential uses shall meet the standards of Section 5-1400, and shall be landscaped, bermed, screened and maintained with natural vegetation to buffer and screen such areas.
- (2) In addition to Section 5-1400 existing trees and ground cover along all other boundary lines shall be preserved, maintained and supplemented by selective cutting, transplanting, and addition of new trees, shrubs and other ground cover for the depth of the setback.
- (3) The type, time of planting, design and spacing of planting screen shall be in accordance with Section 5-1400. Approval of maintenance of landscape areas by the Zoning Administrator shall be required for zoning permit extension and zoning permit renewal.
- (E) Notwithstanding the provisions of Sections 5-1505 and 5-1507 of this Division, all extraction and mining special exception operations shall be subject only to the following performance standards as they relate to noise and earthborn vibrations:

- (1) Blasting vibration shall be limited to a peak particle velocity\* for a corresponding frequency level, as shown in the chart below.



\*Peak particle velocities shall be recorded in three mutually perpendicular directions. The maximum peak particle velocity shall be the largest of any of the three measurements.

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- (2) Earth vibration produced from sources other than blasting shall not exceed a maximum resultant peak particle velocity of .03 inches per second.
- (3) The peak over pressure (noise) from any blast shall be limited to 129 dB, as measured at 5 or 6 Hz high pass system.
- (4) Airborne noise produced from extractive operations other than blasting shall not exceed the following limit, as measured at the lot line of the extractive industry: 80dBA maximum, continuous noise.
- (5) For noise and vibrations induced by blasting, measurement shall be taken at the nearest off-site occupied building, measured in a straight line distance from the point of the blast.
- (6) For noise and vibrations induced by sources other than blasting, measurement shall be taken at the property line of the extractive industry.
- (F) In addition, the Board of Supervisors, as a condition of a special exception, may further limit vibration and noise levels where, in the Board's opinion, the existing and proposed surrounding land use or proximity of population in the area warrants additional protection.

**5-1507**

**Noise Standards.** It shall be unlawful for any person to operate or permit to be operated any stationary noise source in such a manner as to create a sound level which exceeds the limits set forth in the following tables, except for extraction and mining special exception operations otherwise regulated herein. In addition, before 7 a.m. and after 7 p.m., the permissible sound levels, at residential district boundaries where they adjoin nonresidential districts, shall be reduced by 5 dba in the table for impact noises.

(A) **Methods of Measurement.**

- (1) Noise levels shall be measured with a sound level meter and shall meet or exceed performance standards for a "Type Two" meter, as specified by the American National Standards Institute.
- (2) Noise levels shall be recorded as A-weighted sound pressure level. The level so read shall be postscripted dBA.

(B) **Maximum Sound Levels (dBA).** Measurements of noise levels shall be taken at the property boundary of the noise source. Where differing zoning districts abut, the more restrictive limit shall apply.

(1) **Maximum dBA, Continuous Noise.**

Residential	55
Commercial	60
Industrial	70

Continuous noise shall be measured using the slow meter response of the sound level meter.

(2) **Maximum dBA, Impact Noise.**

Residential	60
Commercial	70
Industrial	80

Impact noise shall be measured using the fast meter response of the sound level meter. Impact noises are intermittent sounds of a single pressure peak or a single burst (multiple pressure peaks) for a duration usually less than one second. Examples of impact noise sources are a punch press, drop forge hammer, or explosive blasting.

(C) **Exemptions.**

- (1) The limitations stated above shall not apply within any district nor within any area subject to a Noise Exposure Forecast in excess of the 30 level as indicated on the "Noise Exposure Forecast (NEF) Areas in the Vicinity of Dulles International Airport for 1975 Operations, September 1969" as prepared by FAA. The boundaries of such noise areas within Loudoun County are indicated on the Zoning Map.
- (2) Sound created by the operation of power equipment, such as power lawn mowers, chain saws, and similar equipment, between the hours of 7 a.m. and 9 p.m. shall not be regulated by these noise standards.

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## Steep Slope Standards

(A) **Purpose and Intent.** Improper uses and disturbances in steep slope areas cause erosion, result in structural failure of structures and roads, and lead to downstream flooding and other hazards. Development in these areas also requires higher volumes of cut and fill and greater removal of vegetation than on flatter lands. The provisions in this Section 5-1508, including a prohibition of development on very steep slope areas greater than 25% and performance standards for development on moderately steep slope areas from 15% to 25%, are intended to specifically promote the following:

- (1) Undertake development in a manner that will protect life and property from hazards due to slope, unstable and erodible soils, earth movement, and other geologic and hydrologic hazards;
- (2) Reduce potential for increased erosion, sedimentation, and surface runoff, and the resulting adverse impacts on water quality;
- (3) Promote a safe means of ingress and egress for vehicular and pedestrian traffic in sloped areas;
- (4) Preserve the visual quality of steep slope areas, which are a valuable natural and economic resource; and
- (5) Encourage innovative and imaginative building techniques to create structures and site plans that are suited to sloped terrain.

(B) **Applicability and Exemptions.**

(1) **Applicability.**

- (a) **General Rule.** Except as exempted in (2) below, this section shall apply to all land disturbing activity, including new development and subdivision, proposed on areas of properties containing steep slopes as those terms are defined in Section 5-1508(C)(1) below.

~~(b) **Steep Slopes in the RSCOD—Conflicting Provisions**~~  
~~This Section 5-1508 shall apply to steep slope areas, as defined in Section 5-1508(C)(1) below, that are located within a Protected River and Stream Corridor subject to Section 4-2000, River and Stream Corridor Overlay District (RSCOD). However, to the extent that the standards in this Section 5-1508 conflict with provisions in the RSCOD (Section 4-2000), the standard that affords the steep slopes the greater level of protection shall apply.~~

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- 1 (c) **Steep Slopes in the MDOD—Conflicting Provisions.**  
2 This Section 5-1508 shall apply to steep slope areas, as  
3 defined in Section 5-1508(C)(1) below, that are located  
4 within the Mountain Development Overlay District and  
5 subject to the standards in the MDOD, Section 4-1600.  
6 However, to the extent that the standards in this Section  
7 5-1508 conflict with provisions in the MDOD (Section  
8 4-1600), the standard that affords the steep slopes the  
9 greater level of protection shall apply.

10 (2) **Exemptions.**

- 11 (a) **Single Family Dwelling on Existing Legal Lot.** A legal  
12 lot of record, intended for single family development,  
13 may be developed for a single-family detached dwelling  
14 use. Such exemption shall not apply to non-residential  
15 uses. Development on such lot shall be subject to all  
16 other applicable standards in this Section.
- 17 (b) **Agricultural Operations.** Agricultural operations shall  
18 be conducted only in accordance with the Facilities  
19 Standards Manual and a Conservation Farm Management  
20 Plan approved by the Loudoun County Soil and Water  
21 Conservation District or the U.S. Natural Resources and  
22 Conservation Service that includes best management  
23 practices. Structures associated with agricultural  
24 operations are not exempt from these provisions.
- 25 (c) **Timber Harvesting.** Timber harvesting shall be  
26 conducted only in conformance with a Forest  
27 Management Plan approved by both the Virginia  
28 Department of Forestry and the County.

- 29 (3) **Modifications.** Administrative modifications of standards are  
30 allowed, in accordance with Section 6-408, "Modifications," of  
31 the Zoning Ordinance.

32 (C) **Establishment of Steep Slope Areas.**

- 33 (1) **Identification of Steep Slope Areas.** Steep slope areas are  
34 classified into one of the following two categories:

- 35 (a) **Very Steep Slope Areas.** This category of steep slope  
36 areas includes land areas with slopes greater than 25%.  
37 ~~Very steep slope areas shall be considered primary~~  
38 ~~conservation areas for purposes of applying Conservation~~  
39 ~~Design pursuant to Section 6-2004.~~
- 40 (b) **Moderately Steep Slope Areas.** This category of steep  
41 slope areas includes only land areas with slopes from 15%  
42 to 25%. ~~Moderately steep slope areas shall not be~~

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1 ~~considered primary conservation areas for purposes of~~  
2 ~~applying Conservation Design pursuant to Section 6~~  
3 ~~2004.~~

- 4  
5 (2) **Minimum Size of Steep Slope Area.** Steep slope standards do  
6 not apply to isolated steep slope areas that are less than 5,000  
7 square feet in land area. For purposes of this provision, the entire  
8 contiguous area of the steep slopes shall be included in the  
9 minimum size calculation, regardless of the number of individual  
10 lots or different land ownerships involved.

11 (D) **Permitted Uses and Activities.**

12 (1) **Very Steep Slope Areas.**

- 13 (a) **Applicability.** This subsection (D)(1) applies to lands  
14 with very steep slope areas, as defined in subsection  
15 (C)(1)(a), above.
- 16 (b) **General Prohibition on Land Disturbance.** Land  
17 disturbing activities, including but not limited to clearing,  
18 excavation, grading, construction, reconstruction, and  
19 investigative land disturbing activities such as test wells,  
20 are prohibited on any very steep slope area, except as  
21 allowed under subsection (c) below.
- 22 (c) **Permitted Uses and Activities.** The following uses are  
23 permitted on very steep slope areas, subject to the  
24 applicable development standards in Section (E) below:
- 25 (i) Passive recreation uses, including trails for non-  
26 motorized use only;
- 27 (ii) Open space, and other conservation uses;
- 28 (iii) Limited land-disturbing activity not to exceed  
29 5,000 square feet in the aggregate on any property  
30 for the sole purpose of surveying and land  
31 investigation. No heavy equipment shall be used  
32 to conduct or undertake such limited land-  
33 disturbing activity; and
- 34 (iv) Minor utilities, roads and driveways, subject to  
35 standards in the Facilities Standards Manual and  
36 in subsection (E)(4), below.
- 37 (v) Municipal drinking water supply reservoir subject  
38 to obtaining an approved "Location Clearance  
39 Permit" from the Zoning Administrator or his/her  
40 designee, accompanied by as much information as  
41 the Zoning Administrator deems pertinent and  
42 such additional information as the Zoning

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Administrator may require to approve such  
"Location Clearance Permit."

(2) **Moderately Steep Slope Areas.**

- (a) **Applicability.** This subsection (D)(2) applies to lands with moderately steep slope areas, as defined in subsection (C)(1)(b), above.
- (b) **Permitted Uses and Activities.** All uses and activities allowed by right in the underlying zoning district, subject to the review procedures and standards in this ordinance.
- (c) **Special Exception Uses on Moderately Steep Slope Areas.** The County may permit all special exception uses allowed in the underlying zoning district, subject to Section 6-1300, "Special Exceptions."

(E) **Development Standards - Very Steep Slopes.** Development and uses on very steep slope areas shall be planned to minimize disturbance to soil geology, hydrology, and environmental features. At a minimum, development on very steep slope areas shall comply with the guidelines in the Facilities Standards Manual, ~~applicable conservation design standards~~, and except for the development of municipal drinking water supply reservoirs, development on very steep slope areas shall comply with the following standards.

(1) **Grading Standards.** The applicant shall preserve natural landforms and minimize grading and other land disturbance.

- (a) **Cutting to Create Benches.** Cutting and grading to create benches or pads for additional or larger building sites shall be avoided to the maximum extent feasible.
- (b) **Limits on Changing Natural Grade.** The original, natural grade of a lot shall not be raised or lowered more than four (4) feet at any point for the construction of any structure or improvements, except:
  - (i) The lot's original grade may be raised or lowered a maximum of six (6) feet if retaining walls are used to reduce the steepness of man-made slopes, provided that the retaining walls comply with the requirements set forth in this Section.
  - (ii) As necessary to construct a driveway from the road to a garage or parking area, grading changes or retaining walls up to six (6) feet may be allowed

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(iii) These standards limiting change of natural grade shall not apply to grading required to construct or excavate a foundation or basement.

(iv) The Zoning Administrator may approve modifications to this standard if he/she finds that the application:

Is consistent with the intent of this Section 5-1508; and, results in less total site disturbance than would compliance with the maximum limits on changing natural grade stated in this subsection.

(c) **Grading for Accessory Building Pads Prohibited.** Separate building pads for accessory buildings and structures other than private garages, such as tennis courts, swimming pools, outbuildings, and similar facilities, shall be prohibited on moderately steep slope areas.

(2) **Excavation.** To the maximum extent feasible, excavation for footings and foundations shall be limited to lessen site disturbance and ensure compatibility with sloped terrain. .

(3) **Retaining Walls.** Use of retaining walls is encouraged to reduce the steepness of man-made slopes and to provide planting pockets conducive to vegetation, with adherence to the following standards:

(a) Retaining walls shall not exceed four (4) feet in height from the finished grade, except for:

(i) A structure's foundation or basement wall (i.e., a retaining wall may be part of a permitted dwelling unit);

(ii) As necessary to construct a driveway from the street to a garage or parking area; and

(iii) As otherwise expressly allowed by this Section.

(b) In no case shall a retaining wall exceed six (6) feet in height.

(c) Terracing shall be limited to two tiers, except that the County may approve more than two tiers when a greater number of tiers will result in less land disturbance and less steep man-made slopes.

(i) The width of the terrace between any two vertical retaining walls shall be at least five (5) horizontal feet.

(ii) Terraces created between retaining walls shall be permanently landscaped or revegetated pursuant to Landscaping Standards in Section 5-1300.

(d) Retaining walls shall be faced with stone or earth-colored materials similar to the surrounding natural landscape.

(4) **Roads, Driveways, and Minor Utility Standards.**

(a) All roads and driveways shall follow natural contour lines to the maximum extent feasible.

(b) No roads, driveways, and minor utilities shall cross very steep slopes greater than 50%.

(c) Roads shall not be constructed on very steep slopes greater than 25%, unless no other alternative exists to access a legal lot of record approved prior to the effective date of this Section.

(d) Driveways and minor utilities shall not be allowed to cross very steep slopes greater than 25%. However, a short run of no more than 100 feet or 10% of the driveway and/or minor utility's entire length, whichever is greater shall be allowed to cross very steep slopes between 25% and 50%, based on a geotechnical study and findings that:

(i) Such driveway and minor utility will not have significant adverse visual, environmental or safety impacts, or appropriate engineering or other measures will be taken by the developer to substantially mitigate any such adverse impact; and

(ii) No alternative location for access and minor utility is feasible or available.

(e) Shared driveways shall be required to the maximum extent feasible where their use will minimize or eliminate land disturbance, provided that shared driveways are subject to a common access easement.

(f) The centerline grade of private roads and driveways shall comply with applicable standards stated in the Loudoun County Facilities Standards Manual.

(g) Storm drainage and culvert design shall conform to the requirements of the Loudoun County Facilities Standards Manual.

(5) **Revegetation Required.** Any slope exposed or created in new development on steep slope areas shall be revegetated or landscaped, except that Section 5-1300 shall not apply to agricultural uses.

1 (6) **Stormwater Best Management Practices.** The applicant shall  
2 incorporate stormwater management best management practices  
3 and erosion and sediment control practices, as required by  
4 Chapter 5 of the Facilities Standards Manual and such practices  
5 shall be approved by the Department of Building and  
6 Development prior to issuance of a zoning permit.

7 (F) **Development Standards - Moderately Steep Slopes.** No zoning permit shall  
8 be issued for any use, structure or activity on any parcel of land which includes  
9 within its boundaries moderately steep slopes unless and until the following  
10 standards have been met:

- 11 (1) The applicant shall obtain a locational clearance from the Department of  
12 Building and Development. The applicant shall submit a map, plan, or  
13 plat showing the location and extent of moderately steep slopes within  
14 the area to be disturbed, as well as the location and extent of land  
15 disturbing activities and mitigation measures including the proposed  
16 building sites, paved areas, drainfields, well locations, and other uses.  
17  
18 (2) The applicant shall obtain a grading permit in accord with the Codified  
19 Ordinance for all land disturbing activities on all slopes.  
20  
21 (3) The applicant shall incorporate storm water management Best  
22 Management Practices and erosion and sedimentation control practices  
23 as defined by the Facilities Standards Manual into the permit application,  
24 and such practices shall be approved by the Department of Building and  
25 Development.  
26  
27

**Administration of Performance Standards.**

- (A) **Zoning Permit Procedure.** Before the Zoning Administrator issues a zoning permit, the applicant shall furnish sufficient information to enable the Zoning Administrator to ensure that all performance standards and site development standards set forth in this ordinance can and will be complied with. The Zoning Administrator, in order to determine whether or not the applicant will meet such standards, may require the applicant to submit the following information:
- (1) A plot plan signed by the applicant and drawn to scale showing the location of all existing and proposed structures, drives, parking lots, waste disposal areas, bulk storage areas, streets, streams, or other significant features on or within two hundred (200) feet of the proposed site, not including public right-of-ways or easements.
  - (2) A description of the activity to be conducted regarding waste products, external effects or other conditions which are regulated herein; provided however, that the applicant shall not be required to reveal any trade secrets or sufficient detail with regard to a process which would cause any secret process or manufacturing procedure for a closely guarded proprietary compound or product to become public knowledge and be available to competitors.
  - (3) The type and location of abatement devices to control, or recording instruments to measure, conformance with required standards, not including devices and instruments which are inherent in the manufacturing process.
  - (4) Such other data and certification as may reasonably be required, in addition to the informational requirements of Section 6-1000, by the Zoning Administrator to reach a determination.
- (B) All information and evidence submitted in applications to indicate conformity to performance standards shall constitute a certification and an agreement on the part of the applicant that the proposed use can and will conform to such standards at all times.

**Enforcement of Performance Standards.**

- (A) **Intent Concerning Determinations Involved in Administration and Enforcement of Performance Standards.** Determinations necessary for administration and enforcement of performance standards set forth in this article range from those which can be made by a reasonable person using normal senses and no equipment to those requiring great technical

competence and complex equipment for precise measurement. It is the intent of this ordinance that:

- (1) Where determinations can be made by the Zoning Administrator or other County employee using equipment normally available to the County or obtainable without extraordinary expense, such determinations shall be so made before notice of violation is issued.
  - (2) Where technical complexity or extraordinary expense makes it unreasonable for the County to maintain the personnel or equipment necessary for making difficult or unusual determinations, procedures shall be available for protecting individuals from arbitrary and capricious administration and enforcement of performance standard regulations and for protecting the general public from unnecessary costs for administration and enforcement.
- (B) **Simple Determinations.** If the Zoning Administrator finds that determinations of the nature indicated in Section 5-1510(A)(1) are adequate to demonstrate violations of performance standards in particular cases and if such violations exist, he shall take, or cause to be taken, such lawful action as is appropriate to cause correction of such violations. Failure to obey lawful orders concerning correction of such violations shall be punishable as provided generally for violations herein and in other laws or regulations affecting the case.
- (C) **Complex Determinations.** If the Zoning Administrator finds that determinations of the nature indicated in Section 5-1510(A)(2) are required to make precise measurements regarding potential violations of performance standards set forth herein and, if in his considered judgment, he believes there is violation of such performance standards, the following procedures shall be followed:
- (1) **Notice and Answer.** The Zoning Administrator shall give notice by registered mail or other means insuring a signed receipt for such notice to the person or persons responsible for the alleged violation. The notice shall describe the particulars of the alleged violation and the reasons why the Zoning Administrator believes there is a violation and shall require an answer or correction of the alleged violation to the satisfaction of the Zoning Administrator within a time limit set by him, but not to exceed 60 days. The notice shall state, and it is hereby declared, that failure to reply or to correct the alleged violation to the satisfaction of the Zoning Administrator within the time limit set constitutes cause for the Zoning Administrator to proceed with enforcement, as provided in Section 6-500. The notice shall further state that, upon request of those to whom it is

directed, technical determinations, as described in this ordinance, will be made and that if violations, as alleged, are found, costs of such determinations shall be charged against those responsible for the violation, in addition to such other penalties as may be appropriate. However, if it is determined that no violation exists, the cost of the determination will be paid by the County.

- (2) **Correction of Violation.** If there is no reply within the time limit set, but the alleged violation is corrected to the satisfaction of the Zoning Administrator, he shall note "violation corrected" on his copy of the notice, shall retain it among his official records and shall send a copy to the alleged violator, in addition to taking such other action as may be warranted.
- (3) **Action--Continuation of Violation.** If there is no reply within the time set (thus establishing admission of violation, as provided in Section 5-1510(C)(1)) and the alleged violation is not corrected to the satisfaction of the Zoning Administrator within the time limit set, he shall proceed to take, or cause to be taken, such action as is warranted by continuation of a violation after notice to cease.
- (4) **Time Extension.** If a reply is received within the time limit set indicating that the alleged violation will be corrected to the satisfaction of the Zoning Administrator but requesting additional time, the Zoning Administrator may grant an extension if he deems it warranted in the circumstances of the case and if the extension will not, in his opinion, cause imminent peril to life, health, or property. If the extension is not granted, the Zoning Administrator shall proceed to bring legal action, as provided in Section 6-500 of this Ordinance.
- (5) **Costs of Determinations--Responsibility.** If a reply is received within the time limit set requesting technical determination, as provided in this Ordinance, and if the alleged violations continue, the Zoning Administrator may call in properly qualified experts to make the determinations. If expert findings indicate violation of the performance standards, the costs of the determinations shall be assessed against the properties or persons responsible for the violation, in addition to such other penalties as may be appropriate under the terms of Section 6-500. If no violation is found, the costs of the determinations shall be paid by the County without assessment against the properties or persons involved.

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